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MONTHLY PROGRESS REPORT NO. 16
for the period June 1-30, 1977
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

Contract No. 68-01-1946

Utah U-a/U-b Tract

aeromet inc.

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by

Aeromet, Inc.
P.O. Box 45447
Tulsa, OK 74145

Utah U-a/U-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for June, 1977 at Casper, Wyoming; near the Colorado C-b Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville Utah; Rock Springs, Wyoming; and the U-a/U-b Tract 5 miles south of Bonanza, Utah. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made ½ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into seven parts, one corresponding to each of the seven field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 . . . . The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Utah U-a/U-b Tract Field Summary

No problems were experienced at the site for the month of June. The observer attempted 87% of the scheduled pilot balloon launches which resulted in 87% recovery of the temperature data and 84% recovery of the wind data. A 3% loss in wind data resulted from rain showers.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release ½ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analysis 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT (°C/100m)	WIND SPEED
A	<-1.9	≤2
B	-1.9 - -1.7	≤5
C	-1.7 - -1.5	≤6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	≤5
F	>1.5	≤3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

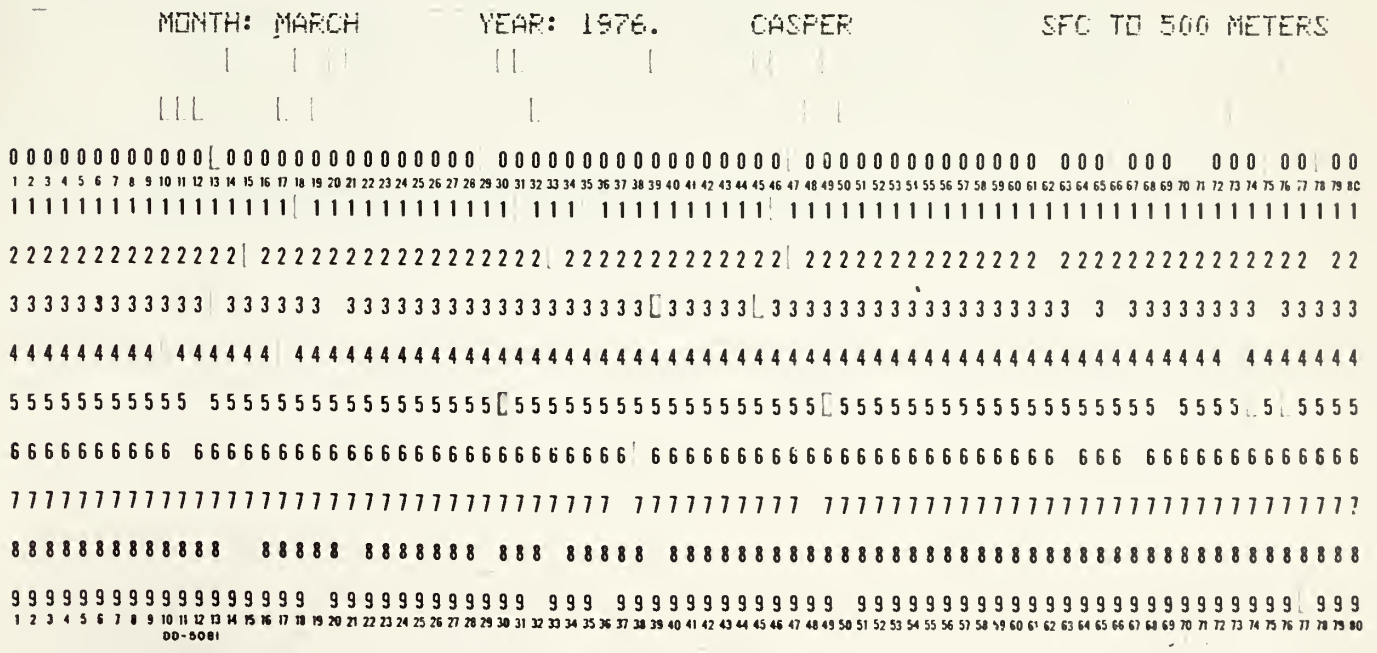
if the $\Delta T/100m$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,



and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. NUMBER
Casper, Wyoming	1
Colorado C-b Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6
Utah U-a/U-b Tract	7

The month and season number codes are as follows:

MONTH	1-12
SEASON	13 = DJF
	14 = MAM
	15 = JJA
	16 = SON
ANNUAL	17

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
June, 1977

June 2	0448	
	1350	Temperature values were interpolated over the interval from 10 to 12 1/4 minutes.
June 4	0448	
	1350	Temperature values were interpolated over the interval from 7 to 11 minutes.
June 6	0448	
	AFTN	No observations were made due to thunderstorms in the area.
June 8	MORN	The observer made no attempt to collect the data.
	1350	No wind observations were made due to rain.
June 10	0447	
	1340	Temperature values were interpolated over the interval from 11 1/4 to 14 3/4 minutes.
June 12	0446	
	1350	Temperature values were interpolated over the interval from 5 1/4 to 11 1/2 minutes.
June 14	0450	
	1350	Balloon entered the clouds at 11 1/2 minutes. The neighboring levels support the 44 m s^{-1} wind speed at 464 m AGL, however, the value seems too large.
June 16	0446	Balloon was lost from sight at 6 1/2 minutes.
	1350	

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
June, 1977

June 18	0450	
	1350	Temperature values were interpolated over the interval from 10 1/2 to 12 1/4 minutes.
June 20	0450	
	AFTN	No observation was made due to very strong winds.
June 22	0501	
	1400	No observations was made due to very strong winds
June 24	0448	Temperature values were interpolated over the interval from 13 1/4 to 14 3/4 minutes.
	1402	
June 26	0449	
	1402	Temperature values were interpolated over the interval from 4 1/2 to 13 1/2 minutes.
June 28	0454	
	1300	Temperature values were interpolated over the interval from 9 3/4 to 13 3/4 minutes.
June 30	0450	
	1403	Temperature values were interpolated over the interval from 1/4 to 1 1/4 minutes.

AVERAGE MIXING LAYER HEIGHT

Utah U-a/U-b Tract

June, 1977

HEIGHT IN METERS

	MORNING			AFTERNOON		
DATE	0°	+5°	+10°	0°	+5°	+10°
2	sfc	175m	750m	N/D	N/D	N/D
4	sfc	125m	275m	3175m	N/D	N/D
6	sfc	150m	725m			
8				sfc	650m	1300m
10	sfc	400m	2000m	1650m	3025m	N/D
12	sfc	150m	650m	4100m	N/D	N/D
14	sfc	75m	325m	250m	750m	1500m
16	sfc	200m	900m	1100m	3000m	N/D
18	sfc	275m	875m	500m	4450m	4600m
20	sfc	100m	2250m			
22	sfc	200m	600m			
24	sfc	200m	600m	1250m	3500m	N/D
26	sfc	1100m	4000m	1100m	2500m	3300m
28	sfc	250m	1050m	1000m	1950m	3050m
30	sfc	150m	700m	1100m	1750m	3500m

CLOUD COVER AND SIGNIFICANT WEATHER

Utah U-a/U-b Tract

June, 1977

DATE	MORNING	AFTERNOON
2	broken	scattered
4	clear	scattered
6	broken	overcast; TRW
8		overcast; rain
10	broken; light rain	broken
12	scattered	scattered
14	clear	scattered
16	scattered	clear
18	clear	clear
20	clear	
22	clear	scattered
24	scattered	broken
26	scattered	scattered
28	scattered	scattered
30	scattered	clear

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4798

DATE 06/02/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	1.01	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4799

DATE 06/02/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.20
100.	250.	-0.91
250.	500.	-1.13
500.	750.	-1.06
750.	1000.	-0.75
1000.	1500.	-1.12

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4804

DATE 06/04/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	381.	1.87	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4805

DATE 06/04/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.84
100.	250.	-0.80
250.	500.	-1.05
500.	750.	-0.93
750.	1000.	-1.06
1000.	1500.	-0.96

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4800

DATE 06/06/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	305.	1.37	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4807

DATE 06/08/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	76.	0.47	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4808

DATE 06/10/77 TIME 04:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	229.	0.56	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4789

DATE 06/10/77 TIME 13:40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	134.	0.0	-2.35

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4811

DATE 06/12/77 TIME 04:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	1.34	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4791

DATE 06/12/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.74
100.	250.	-1.10
250.	500.	-0.94
500.	750.	-1.09
750.	1000.	-0.94
1000.	1500.	-1.01

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4796

DATE 06/14/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	419.	1.69	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4797

DATE 06/14/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
311.	540.	0.19	-0.85

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4794

DATE 06/16/77 TIME 04:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	1.01	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4790

DATE 06/16/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
626.	665.	0.92	-1.18

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4795

DATE 06/18/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	1.38	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4877

DATE 06/18/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
223.	261.	0.0	-1.53

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4878

DATE 06/20/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	152.	2.96	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4881

DATE 06/22/77 TIME 05:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	0.80	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4882

DATE 06/24/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	495.	0.92	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4884

DATE 06/24/77 TIME 14:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
288.	326.	0.0	-1.34

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4870

DATE 06/26/77 TIME 04:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
152.	229.	0.0	-0.35

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4864

DATE 06/26/77 TIME 14:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.69
100.	250.	-0.74
250.	500.	-0.87
500.	750.	-0.84
750.	1000.	-0.75
1000.	1500.	-0.69

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4871

DATE 06/28/77 TIME 04:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	1.52	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4866

DATE 06/28/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
792.	830.	0.45	-1.08

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4867

DATE 06/30/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	267.	1.57	0.0

MONTH: JUNE YEAR: 1977 UTAH UAUB ELEV 1585 METERS

HOLZWORTHIS CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	INVERSION BASE HEIGHT (M) SFC	1-100	101-250	251-500	501-750	751-1000	1001-1500	1501-2000	2001-2500	2501-3000	TOTAL
1 - 100	1	1	2	1	1	1	0	0	0	0	7
101 - 250	4	0	0	1	0	0	0	0	0	0	5
251 - 500	9	0	0	0	0	0	0	0	0	0	9
501 - 750	0	0	0	0	0	0	0	0	0	0	0
751 - 1000	0	0	0	0	0	0	0	0	0	0	0
1001 - 1500	0	0	0	0	0	0	0	0	0	0	0
> 1500	0	0	0	0	0	0	0	0	0	0	0
INV TOTAL	14	1	2	2	1	1	0	0	0	0	21
DT/DZ 5		0	1	0	0	0	0	0	0	0	1
FROM INV 4		0	0	0	0	0	0	0	0	0	0
BASE 3		0	0	1	1	1	0	0	0	0	3
TO 2		0	1	1	0	0	0	0	0	0	2
SFC 1		1	0	0	0	0	0	0	0	0	1
NO INV TOT		4	4	4	4	4	4				
DT/DZ FOR 5		0	0	0	0	0	0				
SAME 4		0	1	0	0	2	1				
LAYERS 3		1	3	4	4	2	3				
AS INV 2		0	0	0	0	0	0				
BASE 1		3	0	0	0	0	0				

DT/DZ (DEG C)/100M

5= 0.00 TO -0.40
4=-0.41 TO -0.80
3=-0.81 TO -1.20
2=-1.21 TO -1.60
1=<-1.60

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM - 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.10	0.0	0.0	0.0	7.3	0.10
NE	0.10	0.0	0.0	0.0	0.0	0.0	0.7	0.10
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.10	0.0	0.0	0.0	9.3	0.10
SSW	0.10	0.0	0.0	0.0	0.0	0.10	12.6	0.20
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.10	0.0	0.0	0.0	0.0	5.3	0.10
W	0.0	0.10	0.0	0.0	0.0	0.0	5.6	0.10
WNW	0.10	0.20	0.0	0.0	0.0	0.0	3.8	0.30
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.1	5.2	8.3	0.0	0.0	24.0		0.0
TOTAL	0.30	0.40	0.20	0.0	0.0	0.10		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.42

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.07	0.07	0.0	0.0	0.0	0.0	3.0	0.14
ESE	0.07	0.0	0.0	0.0	0.0	0.0	1.8	0.07
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.14	0.07	0.0	0.0	0.0	0.0	2.7	0.21
S	0.0	0.14	0.0	0.0	0.0	0.0	3.4	0.14
SSW	0.14	0.21	0.0	0.0	0.0	0.0	3.1	0.36
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.07	0.0	0.0	0.0	0.0	0.0	1.5	0.07
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	2.2	3.4	0.0	0.0	0.0	0.0		0.0
TOTAL	0.50	0.50	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.58

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.04	0.0	0.0	0.0	7.3	0.04
NE	0.04	0.0	0.0	0.0	0.0	0.0	0.7	0.04
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.04	0.04	0.0	0.0	0.0	0.0	3.0	0.08
ESE	0.04	0.0	0.0	0.0	0.0	0.0	1.8	0.04
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.08	0.04	0.0	0.0	0.0	0.0	2.7	0.13
S	0.0	0.08	0.04	0.0	0.0	0.0	5.3	0.13
SSW	0.13	0.13	0.0	0.0	0.0	0.04	5.8	0.29
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.04	0.04	0.0	0.0	0.0	0.0	3.4	0.08
W	0.0	0.04	0.0	0.0	0.0	0.0	5.6	0.04
WNW	0.04	0.08	0.0	0.0	0.0	0.0	5.8	0.13
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.9	4.1	8.3	0.0	0.0	24.0		0.0
TOTAL	0.42	0.46	0.08	0.0	0.0	0.04		1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 1 SOUNDINGS FROM A SAMPLE OF 25 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4798

DATE 06/02/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LARSE	WS M/S	WD DEG
	SFC		14.10		0.0		1.5	180.
1.0	150	1735	16.90	2.80	5.30	8.23	4.6	178.
2.0	300	1885	18.60	1.70	0.88	3.81	4.3	159.
2.7	415.	2000.	18.70	0.09	-0.55	2.40	3.2	193.
3.3	500	2085	18.43	-0.27	-0.88	2.05	2.8	208.
6.0	915.	2500.	15.74	-2.50	-1.42	1.51	3.2	240.
9.3	1415.	3000.	13.19	-2.73	-2.16	0.77	7.3	258.
15.8	2415.	4000.	6.06	-7.15	-2.59	0.34		
22.3	3415.	5000.	-0.41	-6.47	-2.08	0.85		
27.7	4415.	6000.	-9.08	-8.67	-1.55	1.38		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4798

DATE 06/02/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	1.5	1.5	180.
0.5	76.	1661.	-1.7	5.4	5.7	162.
1.0	152.	1737.	-0.1	4.6	4.6	178.
1.5	229.	1814.	-1.3	4.6	4.8	164.
2.0	305.	1890.	-1.5	4.0	4.3	159.
2.5	381.	1966.	-0.0	3.9	3.9	179.
3.0	457.	2042.	1.2	3.4	3.4	340.
3.5	533.	2118.	1.3	2.8	3.1	206.
4.0	610.	2195.	1.9	2.3	3.0	221.
4.5	686.	2271.	2.9	1.7	3.3	240.
5.0	762.	2347.	3.1	1.7	3.6	241.
5.5	838.	2423.	2.9	1.6	3.3	242.
6.0	914.	2499.	2.7	1.6	3.2	240.
6.5	991.	2576.	2.3	2.6	3.4	222.
7.0	1067.	2652.	2.8	3.1	4.0	219.
7.5	1143.	2728.	3.6	3.5	5.0	226.
8.0	1219.	2804.	4.4	3.5	5.7	232.
8.5	1295.	2880.	5.0	4.2	6.5	230.
9.0	1372.	2957.	5.4	4.8	6.6	235.
9.5	1448.	3033.	6.7	3.9	7.8	240.
10.0	1524.	3109.	7.3	3.6	8.1	243.
10.5	1600.	3185.	9.5	5.5	11.0	240.
11.0	1676.	3261.	8.8	6.1	10.7	235.
11.5	1753.	3338.	8.7	6.9	11.2	232.
12.0	1829.	3414.	9.1	7.4	11.8	231.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4799

DATE 06/02/77 TIME 1315OMST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 100M	D/T LAPSE	WS M/S	WD DEG
	SFC		31.33		0.0		6.2	225.
1.0	150	1735	29.68	-1.73	-3.29	-0.86	7.1	237.
1.7	300	1885	28.00	-1.60	-6.35	-3.42	3.6	102.
2.1	415.	2000.	25.60	-1.46	-4.04	-1.11	4.1	224.
2.4	500	2085	25.64	+0.89	-4.04	-1.11	6.6	230.
4.0	915.	2500.	21.35	-3.93	-6.60	-3.68	8.8	251.
5.5	1415.	3000.	16.46	-5.24	-6.00	-3.08	10.6	238.
8.5	2415.	4000.	6.52	-9.95	-6.26	-3.34	11.0	239.
12.0	3415.	25000.	-3.21	-9.74	-7.06	-4.14	8.2	226.
16.2	4415.	6000.	-12.85	-9.63	-1.17	1.75		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4799

DATE 06/02/77 TIME 1315OMST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.4	4.4	6.2	225.
0.5	76.	1661.	6.5	3.1	7.2	245.
1.0	158.	1743.	5.9	4.0	7.1	236.
1.5	246.	1831.	-0.5	3.2	3.2	172.
2.0	381.	1966.	2.6	3.0	3.9	221.
2.5	525.	2110.	5.6	4.4	7.2	232.
3.0	628.	2213.	3.0	2.1	5.5	247.
3.5	760.	2345.	5.1	2.4	5.7	245.
4.0	908.	2493.	5.5	2.0	5.9	250.
4.5	1008.	2593.	4.8	1.1	4.9	257.
5.0	1192.	2777.	7.5	4.0	8.5	242.
5.5	1430.	3015.	9.1	5.8	10.8	238.
6.0	1585.	3170.	1.7	14.4	14.5	187.
6.5	1699.	3284.	11.2	-4.8	12.0	292.
7.0	1840.	3425.	5.6	3.4	6.6	239.
7.5	2017.	3602.	8.7	3.9	9.5	246.
8.0	2213.	3798.	8.0	5.4	9.7	236.
8.5	2418.	4003.	9.5	5.6	11.0	239.
9.0	2561.	4146.	9.7	7.1	12.0	234.
9.5	2679.	4264.	8.0	6.8	10.5	230.
10.0	2854.	4439.	7.8	6.3	10.0	231.
10.5	3009.	4594.	7.3	6.1	9.6	230.
11.0	3131.	4716.	5.4	6.1	8.1	222.
11.5	3264.	4849.	4.5	4.9	6.7	223.
12.0	3430.	5015.	6.1	5.8	8.4	226.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4804

DATE 06/04/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/t 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.01		0.0		1.5	135.
1.0	150	1735	17.52	4.51	5.99	8.91	0.4	233.
2.0	300	1885	20.03	2.50	1.74	4.67	3.7	213.
2.7	415.	2000.	19.32	-0.44	-1.92	1.01	4.8	199.
3.3	500	2085	19.15	-0.44	-1.40	1.53	4.9	192.
6.0	915.	2500.	16.37	-2.78	-0.89	2.04	7.4	194.
9.3	1415.	3000.	13.92	-2.45	-0.72	2.21	4.1	200.
15.8	2415.	4000.	6.81	-7.11	-2.95	-0.02		
22.2	3415.	5000.	-0.41	-7.22	-1.89	1.03		
27.1	4415.	6000.	-8.11	-7.69	4.84	7.77		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4804

DATE 06/04/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.1	1.1	1.5	135.
0.5	76.	1661.	-1.1	2.3	2.5	154.
1.0	152.	1737.	0.3	0.2	0.4	235.
1.5	229.	1814.	1.1	0.9	1.4	232.
2.0	305.	1890.	2.1	3.3	3.9	212.
2.5	381.	1966.	1.8	4.4	4.7	202.
3.0	457.	2042.	1.4	4.7	4.9	196.
3.5	533.	2118.	0.7	4.8	4.8	188.
4.0	610.	2195.	0.4	4.6	4.7	185.
4.5	686.	2271.	1.4	5.3	5.4	194.
5.0	762.	2347.	0.6	4.8	4.8	187.
5.5	840.	2425.	1.0	7.3	7.4	188.
6.0	917.	2502.	1.8	7.2	7.4	194.
6.5	993.	2578.	3.7	7.4	8.3	207.
7.0	1069.	2654.	3.8	6.1	7.2	212.
7.5	1145.	2730.	3.9	5.6	6.8	215.
8.0	1221.	2806.	3.6	5.6	6.7	213.
8.5	1298.	2883.	2.7	5.0	5.7	209.
9.0	1374.	2959.	2.2	4.5	5.0	206.
9.5	1450.	3035.	0.9	3.3	3.4	195.
10.0	1526.	3111.	0.5	2.0	2.0	196.
10.5	1602.	3187.	-0.1	1.2	1.2	175.
11.0	1679.	3264.	-0.1	0.3	0.3	162.
11.5	1755.	3340.	0.9	0.4	1.0	245.
12.0	1831.	3416.	2.1	0.3	2.1	261.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4805

DATE 06/04/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		32.32		0.0		1.9	135.
0.7	150	1735	28.97	-3.35	-5.81	-2.89	0.3	165.
1.1	300	1885	27.40	-1.57	-6.21	-3.28	0.9	197.
1.5	415.	2000.	26.71	-0.69	-6.21	-3.28	1.9	198.
1.8	500	2085	25.09	-1.63	-6.86	-3.33	2.0	208.
3.0	915.	2500.	19.58	-4.37	-7.50	-4.57	1.5	255.
4.4	1415.	3000.	16.37	-4.35	-3.89	-0.96	2.8	218.
10.8	2415.	?4000.	8.68	-7.70	-3.30	-0.37	5.6	143.
15.2	3415.	5000.	0.16	-8.52	-2.46	0.47		
21.3	4415.	6000.	-7.87	-8.04	-5.79	-2.87		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4805

DATE 06/04/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.7	0.7	1.0	135.
0.5	76.	1661.	-0.0	0.0	0.0	144.
1.0	264.	1849.	0.2	0.6	0.7	197.
1.5	417.	2002.	0.6	1.8	1.9	198.
2.0	575.	2160.	1.2	1.6	2.0	218.
2.5	730.	2315.	1.1	1.7	2.0	213.
3.0	904.	2489.	1.4	0.4	1.5	254.
3.5	1104.	2689.	1.2	-0.1	1.2	276.
4.0	1295.	2880.	1.4	-0.3	1.4	278.
4.5	1442.	3027.	1.5	0.9	1.2	204.
5.0	1530.	3115.	0.3	2.7	2.7	183.
5.5	1606.	3191.	0.3	4.2	4.2	184.
6.0	1683.	3268.	-0.8	3.5	3.4	167.
6.5	1759.	3344.	-0.8	2.5	2.7	163.
7.0	1836.	3421.	-2.0	2.3	3.0	138.
7.5	1912.	3497.	-2.5	2.8	3.4	133.
8.0	1988.	3573.	-3.2	2.3	3.9	126.
8.5	2064.	3649.	-3.2	2.3	3.9	126.
9.0	2140.	3725.	-2.8	2.1	3.5	126.
9.5	2217.	3802.	-2.9	1.8	3.4	122.
10.0	2293.	3878.	-2.5	2.6	3.8	138.
10.5	2369.	3954.	-2.0	2.9	3.5	146.
11.0	2445.	4030.	-2.2	2.8	3.6	142.
11.5	2541.	4126.	-2.4	4.0	4.6	149.
12.0	2688.	4273.	-1.9	4.0	4.4	155.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4800

DATE 06/06/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.19		0.0		3.1	135.
1.0	150	1735	16.62	3.43	4.97	7.90	4.0	159.
2.0	300	1885	17.36	0.73	-1.06	1.87	1.1	86.
2.7	415.	2000.	16.46	-0.63	-0.71	2.22	1.2	71.
3.3	500	2085	16.46	-0.27	-0.18	2.75	2.4	75.
6.0	915.	2500.	15.28	-0.90	-0.53	2.39	5.5	125.
9.3	1415.	3000.	13.28	-2.27	-1.44	1.49	7.1	150.
15.7	2415.	4000.	5.39	-7.89	-3.52	-0.60		
21.5	3415.	5000.	-4.67	-10.06	-2.87	0.05		
28.0	4415.	6000.	-11.65	-6.99	-2.34	0.59		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4800

DATE 06/06/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-1.9	4.4	4.8	156.
1.0	152.	1737.	-1.4	3.7	4.0	159.
1.5	229.	1814.	-0.2	0.7	0.7	163.
2.0	305.	1890.	-1.1	-0.2	1.1	81.
2.5	381.	1966.	-0.9	-0.3	0.9	69.
3.0	457.	2042.	-1.4	-0.4	1.5	74.
3.5	533.	2118.	-3.0	-0.8	3.1	75.
4.0	610.	2195.	-3.8	-0.2	3.8	87.
4.5	686.	2271.	-4.1	0.2	4.1	93.
5.0	762.	2347.	-5.3	1.3	5.5	104.
5.5	838.	2423.	-5.8	1.9	6.1	109.
6.0	914.	2499.	-4.5	3.1	5.5	124.
6.5	991.	2576.	-2.8	3.4	4.5	141.
7.0	1067.	2652.	-1.1	4.0	4.1	165.
7.5	1143.	2728.	-1.8	4.8	5.1	159.
8.0	1219.	2804.	-2.2	4.8	5.3	156.
8.5	1295.	2880.	-3.1	5.8	6.5	152.
9.0	1372.	2957.	-4.0	6.4	7.5	148.
9.5	1448.	3033.	-3.2	5.9	6.7	151.
10.0	1524.	3109.	-3.0	5.9	6.6	153.
10.5	1600.	3185.	-2.8	5.6	6.3	153.
11.0	1676.	3261.	-3.0	4.9	5.7	148.
11.5	1753.	3338.	-3.4	4.8	5.9	145.
12.0	1829.	3414.	-3.6	4.4	5.6	141.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4807

DATE 06/08/77 TIME 1315OMST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		17.80		0.0		5.1	90.
1.0	150	1735	17.10	-0.70	-3.00	-0.07	M	M
2.0	300	1885	16.46	-0.64	-0.53	2.40	M	M
2.7	415.	2000.	16.19	-0.27	-0.89	2.04	M	M
3.3	500	2085	16.17	-0.02	0.0	2.93	M	M
6.0	915.	2500.	15.47	-0.70	-0.71	2.22	M	M
9.3	1415.	3000.	14.83	-0.64	0.0	2.93	M	M
14.0	2415.	4000.	7.57	-7.26	-6.06	-3.14		
19.8	3415.	5000.	0.55	-7.02	-2.87	0.85		
25.5	4415.	6000.	-7.70	-8.25	-3.87	-0.94		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4807

DATE 06/08/77 TIME 1315OMST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-5.1	-0.0	5.1	90.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4808

DATE 06/10/77 TIME 04:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SRC		11.73		0.0		1.5	180.
1.0	150	1735	12.91	1.19	1.26	4.19	1.9	170.
1.5	* 228	1813	13.01		-0.72	2.21		
2.0	300	1885	12.56	-0.35	-1.26	1.67	1.2	216.
2.7	415.	2000.	12.37	-0.28	-0.54	2.39	2.3	273.
3.3	500	2085	12.11	-0.17	-1.08	1.84	3.4	282.
6.0	915.	2500.	10.25	-1.95	-0.18	2.75	2.8	141.
8.9	1415.	3000.	6.71	-3.44	-4.06	-1.13	8.9	223.
15.0	2415.	4000.	-0.51	-7.23	-1.71	1.22		
21.4	3415.	5000.	-8.19	-7.68	-3.48	-0.56		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4808

DATE 06/10/77 TIME 04:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	1.5	1.5	180.
0.5	76.	1661.	-0.1	2.8	2.8	179.
1.0	152.	1737.	-0.3	1.9	1.9	170.
1.5	229.	1814.	-0.0	1.6	1.6	180.
2.0	305.	1890.	0.7	0.9	1.2	219.
2.5	381.	1966.	1.4	0.1	1.4	267.
3.0	457.	2042.	3.3	-0.7	3.4	282.
3.5	533.	2118.	3.4	-0.8	3.5	283.
4.0	610.	2195.	2.5	-0.5	2.6	277.
4.5	686.	2271.	1.5	-0.2	1.5	279.
5.0	762.	2347.	0.2	0.1	0.2	254.
5.5	838.	2423.	0.1	1.3	1.3	182.
6.0	914.	2499.	-1.8	2.2	2.8	141.
6.5	991.	2576.	-1.2	3.7	3.9	162.
7.0	1067.	2652.	0.3	5.6	5.6	183.
7.5	1143.	2728.	3.8	5.9	7.0	213.
8.0	1219.	2804.	4.4	5.9	7.3	217.
8.5	1317.	2902.	5.1	5.8	7.7	221.
9.0	1441.	3026.	6.4	6.7	9.2	224.
9.5	1558.	3143.	5.7	5.3	7.8	227.
10.0	1652.	3237.	7.4	5.6	9.3	233.
10.5	1728.	3313.	9.0	5.1	10.3	240.
11.0	1805.	3390.	8.7	5.4	10.2	238.
11.5	1881.	3466.	8.6	5.0	10.0	240.
12.0	1957.	3542.	7.8	5.0	9.2	238.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4789

DATE 06/10/77 TIME 13:40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		27.22		0.0		5.1	180.
0.9	150	1735	24.98	-2.24	-3.22	-0.30	12.1	183.
1.8	300	1885	23.55	-1.43	-2.91	0.02	8.9	187.
2.5	415.	2000.	21.52	-1.55	-3.46	-0.53	6.7	186.
2.9	500	2085	21.54	-0.46	-3.46	-0.53	8.4	173.
5.3	915.	2500.	17.54	-3.99	-3.88	-0.95	6.6	176.
7.7	1415.	3000.	12.37	-4.53	-5.05	-2.12	6.4	170.
13.8	2415.	4000.	7.27	-5.74	-0.92	2.01		
19.0	3415.	5000.	0.07	-7.21	0.0	2.93		
23.9	4415.	6000.	-8.69	-8.75	-2.32	0.60		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4789

DATE 06/10/77 TIME 13:40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	5.1	5.1	180.
0.5	76.	1661.	-0.7	7.5	7.5	174.
1.0	172.	1757.	1.5	14.2	14.3	186.
1.5	256.	1841.	0.6	10.8	10.8	183.
2.0	332.	1917.	1.2	7.3	7.4	189.
2.5	414.	1999.	0.7	6.6	6.6	186.
3.0	514.	2099.	-1.4	8.6	8.7	171.
3.5	618.	2203.	0.0	11.5	11.5	180.
4.0	719.	2304.	-0.9	11.4	11.5	176.
4.5	795.	2380.	-0.6	10.5	10.5	177.
5.0	872.	2457.	-0.9	8.5	8.5	174.
5.5	948.	2533.	-0.2	5.2	5.2	178.
6.0	1062.	2647.	-0.6	8.2	8.2	176.
6.5	1204.	2789.	-2.3	14.0	14.2	171.
7.0	1306.	2891.	-1.5	5.8	6.0	165.
7.5	1383.	2968.	-1.0	6.0	6.1	171.
8.0	1460.	3045.	-1.3	6.8	6.9	169.
8.5	1593.	3178.	-1.2	8.6	8.7	172.
9.0	1670.	3255.	2.7	4.8	5.5	210.
9.5	1746.	3331.	3.5	13.8	14.2	194.
10.0	1823.	3408.	2.9	13.8	14.1	192.
10.5	1899.	3484.	3.1	14.6	14.9	192.
11.0	1986.	3571.	2.1	15.4	15.6	188.
11.5	2062.	3647.	2.7	12.3	12.6	192.
12.0	2138.	3723.	3.6	17.4	17.7	192.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4811

DATE 06/12/77 TIME 04:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SRC		9.32		0.0		2.1	135.
1.0	150	1735	12.44	3.12	5.24	8.17	4.2	132.
2.0	300	1885	13.83	1.39	1.08	0.01	3.1	149.
2.3	* 342	1927	13.92		0.0	2.93		
2.8	415.	2000.	13.74	-0.09	-0.90	2.03	1.5	193.
3.3	500	2085	13.39	-0.35	-1.44	1.49	1.8	224.
6.0	915.	2500.	12.55	-0.85	0.18	3.11	4.3	216.
9.3	1415.	3000.	10.90	-1.65	-1.63	1.29	3.7	311.
15.8	2415.	4000.	3.60	-7.30	-1.87	1.06		
22.4	3415.	5000.	-3.21	-6.81	-3.05	-0.12		
28.9	4415.	6000.	-10.17	-6.96	-1.56	1.37		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4811

DATE 06/12/77 TIME 04:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-2.8	4.7	5.5	150.
1.0	152.	1737.	-3.1	2.7	4.1	131.
1.5	229.	1814.	-1.5	0.4	1.5	105.
2.0	305.	1890.	-1.5	2.8	3.2	152.
2.5	381.	1966.	0.2	1.9	1.9	185.
3.0	457.	2042.	0.4	1.0	1.0	203.
3.5	533.	2118.	2.1	1.2	2.4	240.
4.0	610.	2195.	3.0	1.4	3.3	246.
4.5	686.	2271.	3.2	1.9	3.7	240.
5.0	762.	2347.	2.9	2.1	3.6	234.
5.5	838.	2423.	2.7	2.6	3.8	225.
6.0	914.	2499.	2.5	3.4	4.3	217.
6.5	991.	2576.	1.0	2.3	2.5	204.
7.0	1067.	2652.	1.1	1.0	1.5	227.
7.5	1143.	2728.	1.8	-0.1	1.8	273.
8.0	1219.	2804.	2.1	-1.0	2.3	296.
8.5	1295.	2880.	2.4	-1.5	2.8	303.
9.0	1372.	2957.	2.6	-2.0	3.3	308.
9.5	1448.	3033.	2.9	-2.7	3.9	313.
10.0	1524.	3109.	3.8	-2.7	4.6	305.
10.5	1600.	3185.	4.2	-3.4	5.4	309.
11.0	1676.	3261.	4.6	-3.3	5.7	306.
11.5	1753.	3338.	4.4	-2.8	5.2	303.
12.0	1829.	3414.	4.1	-1.9	4.5	295.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4791

DATE 06/12/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		27.99		0.0		2.1	135.
0.7	150	1735	25.74	-2.24	-6.96	-4.03	1.0	89.
1.1	300	1885	23.65	-2.09	-6.34	-3.41	1.4	76.
1.5	415.	2000.	22.92	-0.71	-6.34	-3.41	1.0	89.
1.7	500	2085	22.15	-0.79	-7.44	-4.52	0.9	55.
2.9	915.	2500.	17.45	-4.66	-5.99	-3.06	2.2	355.
5.0	1415.	3000.	13.10	-4.38	-4.86	-1.93	2.0	260.
9.8	2415.	24000.	2.75	-10.36	-3.93	-1.00	3.5	201.
14.0	3415.	5000.	-7.87	-10.62	-6.18	-3.25		
19.5	4415.	6000.	-9.87	-2.00	2.14	5.07		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4791

DATE 06/12/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-0.8	-0.7	1.0	89.
1.0	252.	1837.	-1.6	-0.5	1.6	71.
1.5	429.	2014.	-0.9	0.0	0.9	90.
2.0	592.	2177.	-0.1	-0.9	0.9	8.
2.5	784.	2369.	0.9	-1.7	1.9	332.
3.0	966.	2551.	1.4	-1.8	2.3	323.
3.5	1108.	2693.	1.2	-1.4	1.8	318.
4.0	1220.	2805.	1.5	-1.6	2.2	318.
4.5	1313.	2898.	1.3	-0.8	1.3	270.
5.0	1425.	3010.	2.0	0.4	2.1	259.
5.5	1553.	3138.	1.6	3.5	3.9	204.
6.0	1663.	3248.	1.9	3.7	4.2	207.
6.5	1767.	3352.	1.1	4.1	4.3	194.
7.0	1869.	3454.	1.1	4.3	4.4	194.
7.5	1965.	3550.	0.9	4.6	4.7	191.
8.0	2061.	3646.	0.1	4.7	4.7	182.
8.5	2159.	3744.	-0.4	4.6	4.7	176.
9.0	2256.	3841.	-1.1	3.9	4.1	165.
9.5	2353.	3938.	0.6	2.7	2.7	193.
10.0	2452.	4037.	1.7	3.6	4.0	206.
10.5	2550.	4135.	0.3	3.9	3.9	184.
11.0	2641.	4226.	-0.5	4.4	4.4	174.
11.5	2739.	4324.	-0.3	5.8	5.8	177.
12.0	2859.	4444.	-0.4	5.7	5.7	176.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4791

DATE 06/12/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		27.99		0.0		2.1	135.
0.7	150	1735	25.74	-2.24	-6.96	-4.03	1.0	58.
1.1	300	1885	23.65	-2.09	-6.34	-3.41	1.4	76.
1.5	415.	2000.	22.92	-0.71	-6.34	-3.41	1.0	89.
1.7	500	2085	22.15	-0.79	-7.44	-4.52	0.9	55.
2.9	915.	2500.	17.45	-4.66	-5.99	-3.06	2.2	325.
5.0	1415.	3000.	13.10	-4.38	-4.86	-1.93	2.0	260.
9.8	2415.	4000.	2.75	-10.36	-3.93	-1.00	3.5	261.
14.0	3415.	5000.	-7.87	-10.62	-6.18	-3.25		
19.5	4415.	6000.	-9.87	-2.00	2.14	5.07		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4791

DATE 06/12/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-0.8	-0.7	1.0	49.
1.0	252.	1837.	-1.6	-0.5	1.6	71.
1.5	429.	2014.	-0.9	0.0	0.9	90.
2.0	592.	2177.	-0.1	-0.9	0.9	8.
2.5	784.	2369.	0.9	-1.7	1.9	332.
3.0	966.	2551.	1.4	-1.8	2.3	323.
3.5	1108.	2693.	1.2	-1.4	1.8	318.
4.0	1220.	2805.	1.5	-1.6	2.2	318.
4.5	1313.	2898.	1.3	-0.0	1.3	270.
5.0	1425.	3010.	2.0	0.4	2.1	259.
5.5	1553.	3138.	1.6	3.5	3.9	204.
6.0	1663.	3248.	1.9	3.7	4.2	207.
6.5	1767.	3352.	1.1	4.1	4.3	194.
7.0	1869.	3454.	1.1	4.3	4.4	194.
7.5	1965.	3550.	0.9	4.6	4.7	191.
8.0	2061.	3646.	0.1	4.7	4.7	182.
8.5	2159.	3744.	-0.4	4.6	4.7	176.
9.0	2256.	3841.	-1.1	3.9	4.1	165.
9.5	2353.	3938.	0.6	2.7	2.7	193.
10.0	2452.	4037.	1.7	3.6	4.0	206.
10.5	2550.	4135.	0.3	3.9	3.9	184.
11.0	2641.	4226.	-0.5	4.4	4.4	174.
11.5	2739.	4324.	-0.3	5.8	5.8	177.
12.0	2859.	4444.	-0.4	5.7	5.7	176.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4796

DATE 06/14/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		10.44		0.0		2.6	135.
1.0	150	1735	16.45	6.01	2.49	5.42	3.2	157.
1.0	* 152	1737	16.46		2.49	5.42		
2.0	300	1885	15.92	-0.53	1.60	4.52	2.3	216.
2.7	415.	2000.	17.45	1.61	0.18	3.10	2.9	216.
3.3	500	2085	16.85	-0.68	-1.94	0.98	3.1	207.
6.0	915.	2500.	14.56	-2.11	-1.61	1.32	4.3	264.
9.3	1415.	3000.	12.37	-2.37	-1.26	1.67	5.1	222.
13.8	2415.	4000.	6.53	-5.84	-2.59	0.34		
22.4	3415.	5000.	-0.03	-6.56	-1.52	1.60		
28.5	4415.	6000.	-8.19	-8.17	-1.94	0.99		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4796

DATE 06/14/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-2.1	2.9	3.6	144.
1.0	152.	1737.	-1.5	3.0	3.2	158.
1.5	229.	1814.	0.6	1.5	1.6	202.
2.0	305.	1890.	1.4	1.9	2.4	217.
2.5	381.	1966.	1.5	2.5	2.9	211.
3.0	457.	2042.	1.9	2.1	2.8	222.
3.5	533.	2118.	2.8	2.1	3.2	230.
4.0	610.	2195.	3.5	1.8	3.9	243.
4.5	686.	2271.	3.7	1.5	4.0	248.
5.0	762.	2347.	3.7	1.4	3.9	250.
5.5	838.	2423.	4.0	0.5	4.1	265.
6.0	914.	2499.	4.3	0.5	4.3	264.
6.5	991.	2576.	4.5	1.4	4.7	253.
7.0	1067.	2652.	4.3	1.5	4.6	251.
7.5	1143.	2728.	4.3	1.7	4.6	249.
8.0	1219.	2804.	3.8	1.9	4.3	245.
8.5	1295.	2880.	3.3	2.6	4.2	232.
9.0	1372.	2957.	3.4	3.5	4.9	224.
9.5	1448.	3033.	3.3	4.0	5.2	220.
10.0	1524.	3109.	2.7	4.0	4.8	214.
10.5	1600.	3185.	5.0	6.6	8.3	217.
11.0	1676.	3261.	3.8	5.8	6.9	213.
11.5	1753.	3338.	3.3	6.0	6.8	209.
12.0	1829.	3414.	3.8	6.4	7.5	210.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4797

DATE 06/14/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		28.83		0.0		7.7	180.
0.9	150	1735	27.06	-1.77	-2.51	0.42	8.3	195.
1.9	300	1885	26.20	-0.86	-0.50	2.42	15.7	199.
2.7	415.	2000.	26.63	0.08	0.67	3.60	37.4	198.
3.2	500	2085	26.63	0.34	-0.17	2.76	42.9	198.
6.0	915.	2500.	25.26	-1.37	-1.35	1.57	4.5	215.
9.2	1415.	3000.	23.79	-1.55	0.17	3.10	38.3	201.
15.8	2415.	4000.	19.06	-4.64	-3.49	-0.57		
21.7	3415.	5000.	11.45	-7.61	-2.17	0.76		
25.6	4415.	6000.	0.75	-10.70	-6.02	-3.09		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4797

DATE 06/14/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	7.7	7.7	180.
0.5	76.	1661.	0.9	4.6	4.7	192.
1.0	159.	1744.	2.3	8.4	8.8	195.
1.5	235.	1820.	4.0	10.7	11.4	200.
2.0	311.	1896.	5.2	15.6	16.5	199.
2.5	387.	1972.	10.6	31.7	33.5	198.
3.0	464.	2049.	13.2	42.2	44.2	197.
3.5	540.	2125.	12.6	39.5	41.4	198.
4.0	616.	2201.	8.4	37.5	38.4	193.
4.5	692.	2277.	0.2	10.7	10.7	181.
5.0	768.	2353.	0.5	5.9	5.9	185.
5.5	845.	2430.	0.6	0.8	1.0	217.
6.0	921.	2506.	2.7	4.0	4.8	214.
6.5	997.	2582.	3.6	2.8	4.6	233.
7.0	1073.	2658.	4.2	2.0	4.6	245.
7.5	1149.	2734.	6.5	13.7	15.1	205.
8.0	1226.	2811.	7.1	16.2	17.7	204.
8.5	1302.	2887.	9.4	21.9	23.9	203.
9.0	1378.	2963.	11.5	30.1	32.3	201.
9.5	1454.	3039.	15.3	42.0	44.7	200.
10.0	1530.	3115.	12.6	29.9	32.5	203.
10.5	1607.	3192.	13.9	26.3	29.8	208.
11.0	1683.	3268.	10.8	29.2	31.1	200.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4794

DATE 06/16/77 TIME 04:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		11.36		0.0		10.8	180.
1.0	150	1735	12.45	1.09	3.96	6.89	1.0	234.
2.0	300	1885	14.65	2.20	1.43	4.36	1.2	108.
2.7	415.	2000.	14.10	0.00	-1.07	1.85	3.6	79.
3.3	500	2085	14.10	-0.55	-0.72	2.21	6.0	73.
6.0	915.	2500.	12.28	-1.82	-1.63	1.30	M	M
9.3	1415.	3000.	8.68	-3.60	-2.20	0.73	M	M
15.0	2415.	4000.	1.79	-6.89	-2.26	0.67		
21.8	3415.	5000.	-6.14	-7.93	-3.27	-0.35		
27.9	4415.	6000.	-14.04	-7.90	-2.55	0.38		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4794

DATE 06/16/77 TIME 04:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	10.8	10.8	180.
0.5	76.	1661.	0.2	1.5	1.5	188.
1.0	152.	1737.	0.8	0.6	1.0	235.
1.5	229.	1814.	0.7	2.2	2.3	197.
2.0	305.	1890.	-1.1	0.2	1.1	102.
2.5	381.	1966.	-2.8	-0.6	2.8	79.
3.0	457.	2042.	-4.5	-0.9	4.6	79.
3.5	533.	2118.	-6.6	-2.6	7.1	68.
4.0	610.	2195.	-7.6	-4.4	8.7	60.
4.5	686.	2271.	-8.1	-5.0	9.6	58.
5.0	762.	2347.	-8.6	-5.5	10.2	58.
5.5	838.	2423.	-7.5	-4.9	9.0	57.
6.0	914.	2499.	-6.9	-6.0	9.2	49.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4790

DATE 06/16/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		30.92		0.0		5.1	270.
0.7	150	1735	27.57	-3.35	-3.85	-0.92	6.2	275.
1.3	300	1885	26.06	-1.51	-2.86	0.07	6.3	282.
2.0	415.	2000.	24.05	-1.11	-3.06	-0.13	3.0	279.
2.4	500	2085	24.07	-0.88	-3.06	-0.13	6.4	276.
4.9	915.	2500.	21.55	-2.54	-3.45	-0.52	4.8	248.
8.1	1415.	3000.	17.89	-3.01	-1.40	1.52	4.6	213.
14.3	2415.	4000.	11.64	-6.88	-3.45	-0.52		
19.9	3415.	5000.	2.08	-9.56	-2.82	0.11		
26.3	4415.	6000.	-4.96	-7.04	-1.92	1.01		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4790

DATE 06/16/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	5.1	0.0	5.1	270.
0.5	76.	1661.	3.6	-0.3	3.6	274.
1.0	247.	1832.	9.7	-1.2	9.8	277.
1.5	334.	1919.	4.0	-1.1	4.1	285.
2.0	410.	1995.	2.8	-0.5	2.9	279.
2.5	511.	2096.	6.8	-0.7	6.8	276.
3.0	588.	2173.	6.0	0.9	6.0	262.
3.5	664.	2249.	4.7	2.2	5.1	245.
4.0	741.	2326.	4.1	2.6	4.9	238.
4.5	829.	2414.	4.2	2.5	4.9	239.
5.0	934.	2519.	4.4	1.7	4.8	249.
5.5	1016.	2601.	2.5	1.7	3.1	236.
6.0	1092.	2677.	2.0	1.9	2.7	227.
6.5	1168.	2753.	2.6	2.4	3.5	227.
7.0	1244.	2829.	3.7	3.0	4.8	231.
7.5	1320.	2905.	2.4	3.0	3.8	219.
8.0	1397.	2982.	2.3	3.8	4.4	211.
8.5	1473.	3058.	3.2	3.9	5.1	219.
9.0	1549.	3134.	3.6	5.3	6.4	214.
9.5	1625.	3210.	3.4	5.8	6.7	210.
10.0	1701.	3286.	3.5	7.0	7.9	207.
10.5	1778.	3363.	3.4	7.5	8.2	204.
11.0	1854.	3439.	2.6	8.0	8.5	198.
11.5	1930.	3515.	2.1	7.3	7.6	196.
12.0	2006.	3591.	1.3	6.1	6.2	192.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4795

DATE 06/18/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.92		0.0		2.6	180.
1.0	150	1735	16.55	2.62	1.60	4.53	3.8	178.
2.0	300	1885	15.92	-0.62	-1.60	1.33	3.1	215.
2.7	415.	2000.	15.56	-0.37	0.89	3.82	3.3	227.
3.3	500	2085	15.99	0.43	0.53	3.46	3.3	202.
6.0	915.	2500.	14.74	-0.98	-1.61	1.32	5.9	284.
9.3	1415.	3000.	12.83	-2.19	-0.36	2.57	7.8	255.
15.8	2415.	4000.	6.81	-6.02	-2.21	0.71		
22.4	3415.	5000.	1.02	-5.78	-1.32	1.61		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4795

DATE 06/18/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	2.6	2.6	180.
0.5	76.	1661.	-1.4	4.6	4.8	163.
1.0	152.	1737.	-0.1	3.8	3.8	179.
1.5	229.	1814.	1.5	2.6	3.0	211.
2.0	305.	1890.	1.8	2.5	3.1	215.
2.5	381.	1966.	2.0	2.5	3.2	219.
3.0	457.	2042.	2.8	1.9	3.4	236.
3.5	533.	2118.	3.1	1.3	3.3	247.
4.0	610.	2195.	3.5	-0.5	3.5	278.
4.5	686.	2271.	3.6	-1.0	3.8	285.
5.0	762.	2347.	4.9	-1.4	5.1	285.
5.5	838.	2423.	5.8	-1.5	6.0	284.
6.0	914.	2499.	5.7	-1.4	5.9	284.
6.5	991.	2576.	7.3	-0.4	7.3	273.
7.0	1067.	2652.	8.1	0.9	8.2	264.
7.5	1143.	2728.	8.3	1.1	8.4	263.
8.0	1219.	2804.	8.5	1.0	8.5	263.
8.5	1295.	2880.	8.0	1.1	8.1	262.
9.0	1372.	2957.	7.5	0.7	7.5	265.
9.5	1448.	3033.	7.4	3.1	8.1	247.
10.0	1524.	3109.	8.5	3.1	9.0	250.
10.5	1600.	3185.	9.3	2.7	9.7	254.
11.0	1676.	3261.	7.9	4.8	9.2	239.
11.5	1753.	3338.	7.4	6.0	9.5	231.
12.0	1829.	3414.	7.5	6.8	10.1	228.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4877

DATE 06/18/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		29.00		0.0		6.2	270.
0.8	150	1735	26.25	-2.75	-2.19	0.74	3.1	260.
1.8	300	1885	25.12	-1.12	-2.37	0.56	4.9	305.
2.5	415.	2000.	23.88	-0.89	-1.70	1.22	5.1	309.
3.1	500	2085	23.71	-0.52	-1.71	1.22	4.8	283.
5.7	915.	2500.	20.20	-3.49	-4.17	-1.25	6.1	261.
8.6	1415.	3000.	16.91	-2.87	-1.77	1.16	11.0	238.
14.0	2415.	4000.	7.02	-10.33	-6.08	-3.15		
18.3	3415.	5000.	-1.28	-8.30	-3.41	-0.49		
23.0	4415.	6000.	-3.41	-2.13	-1.34	1.59		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4877

DATE 06/18/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	6.2	0.0	6.2	270.
0.5	76.	1661.	2.8	0.9	2.9	252.
1.0	184.	1769.	3.1	0.3	3.1	264.
1.5	261.	1846.	3.8	-2.2	4.4	300.
2.0	337.	1922.	4.1	-3.3	5.3	309.
2.5	413.	1998.	4.0	-3.2	5.1	309.
3.0	489.	2074.	4.8	-1.2	4.9	284.
3.5	565.	2150.	3.9	-0.4	3.9	276.
4.0	642.	2227.	5.1	-1.0	5.2	281.
4.5	718.	2303.	5.5	-0.8	5.6	278.
5.0	794.	2379.	5.8	-0.3	5.8	273.
5.5	881.	2466.	5.3	0.6	5.3	264.
6.0	993.	2578.	7.5	2.2	7.8	252.
6.5	1084.	2669.	6.4	5.3	7.8	236.
7.0	1164.	2749.	7.2	5.3	9.0	234.
7.5	1240.	2825.	7.1	4.9	8.6	235.
8.0	1316.	2901.	8.5	4.9	9.8	240.
8.5	1393.	2978.	9.2	5.8	11.1	239.
9.0	1469.	3054.	8.9	6.1	10.7	236.
9.5	1550.	3135.	8.6	7.1	11.1	231.
10.0	1626.	3211.	8.3	6.3	10.5	233.
10.5	1702.	3287.	6.1	4.5	7.6	234.
11.0	1799.	3384.	8.5	5.1	9.9	239.
11.5	1888.	3473.	8.5	3.7	9.2	246.
12.0	1966.	3551.	8.8	3.1	9.4	251.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4878

DATE 06/20/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.74		0.0		5.1	180.
1.0	150	1735	18.24	4.50	3.54	6.47	3.5	164.
2.0	300	1885	17.18	-1.06	-2.12	0.81	2.9	173.
2.7	415.	2000.	15.92	-1.17	-2.31	0.62	2.6	195.
3.3	500	2085	15.31	-0.70	-2.14	0.79	2.7	199.
6.0	915.	2500.	12.55	-2.38	-1.98	0.95	6.2	191.
9.3	1415.	3000.	9.51	-3.42	-1.83	1.10	9.1	209.
15.2	2415.	4000.	0.74	-8.77	-1.89	1.04		
21.1	3415.	5000.	-8.00	-8.73	-3.48	-0.55		
27.5	4415.	6000.	-14.04	-6.04	-1.37	1.55		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4878

DATE 06/20/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	5.1	5.1	180.
0.5	76.	1661.	-0.3	4.6	4.6	176.
1.0	152.	1737.	-1.0	3.4	3.5	164.
1.5	229.	1814.	-0.6	2.9	2.9	169.
2.0	305.	1890.	-0.3	2.9	2.9	173.
2.5	381.	1966.	0.5	2.4	2.5	192.
3.0	457.	2042.	0.8	2.6	2.7	198.
3.5	533.	2118.	1.0	2.6	2.8	201.
4.0	610.	2195.	0.6	2.8	2.8	192.
4.5	686.	2271.	0.6	3.7	3.7	190.
5.0	762.	2347.	0.5	4.7	4.7	186.
5.5	838.	2423.	0.3	4.7	4.7	184.
6.0	914.	2499.	1.2	6.1	6.2	191.
6.5	991.	2576.	1.8	5.8	6.1	198.
7.0	1067.	2652.	2.7	4.9	5.6	209.
7.5	1143.	2728.	2.9	5.3	6.1	209.
8.0	1219.	2804.	3.2	5.8	6.6	209.
8.5	1295.	2880.	4.0	7.8	8.8	207.
9.0	1372.	2957.	4.6	7.8	9.1	211.
9.5	1448.	3033.	4.5	8.0	9.0	208.
10.0	1524.	3109.	4.3	8.7	9.8	206.
10.5	1602.	3187.	5.1	9.5	10.8	208.
11.0	1690.	3275.	5.1	10.2	11.4	206.
11.5	1768.	3353.	4.9	8.9	10.2	209.
12.0	1844.	3429.	5.3	9.3	10.7	210.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4881

DATE 06/22/77 TIME 05:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		10.07		0.0		6.7	180.
1.0	150	1735	12.09	2.03	3.25	6.18	3.1	141.
2.0	300	1885	13.55	1.46	1.80	4.73	2.0	103.
2.7	415.	2000.	13.74	0.19	-0.18	2.75	4.7	78.
3.3	500	2085	13.65	-0.09	-0.18	2.75	6.8	74.
6.0	915.	2500.	12.09	-1.36	-1.99	0.94	7.6	58.
9.3	1415.	3000.	9.60	-2.68	-1.64	1.29	5.6	67.
15.8	2415.	4000.	4.74	-4.87	-0.56	2.37		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4881

DATE 06/22/77 TIME 05:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	6.7	6.7	180.
0.5	76.	1661.	-2.7	4.7	5.4	150.
1.0	152.	1737.	-1.9	2.3	3.0	140.
1.5	229.	1814.	-0.5	0.2	0.5	114.
2.0	305.	1890.	-2.0	0.4	2.1	102.
2.5	381.	1966.	-3.5	-0.7	3.6	78.
3.0	457.	2042.	-6.0	-1.3	6.2	78.
3.5	533.	2118.	-6.8	-2.4	7.2	71.
4.0	610.	2195.	-6.9	-4.0	8.0	60.
4.5	686.	2271.	-5.1	-5.3	7.3	44.
5.0	762.	2347.	-5.1	-5.8	7.7	41.
5.5	838.	2423.	-4.8	-5.7	7.4	40.
6.0	914.	2499.	-4.6	-6.0	7.6	38.
6.5	991.	2576.	-4.3	-5.0	7.1	38.
7.0	1067.	2652.	-5.7	-5.5	7.9	46.
7.5	1143.	2728.	-5.4	-4.5	7.0	50.
8.0	1219.	2804.	-6.4	-4.3	8.0	53.
8.5	1295.	2880.	-5.7	-3.8	6.9	56.
9.0	1372.	2957.	-5.4	-3.1	6.2	60.
9.5	1448.	3033.	-4.9	-1.5	5.1	73.
10.0	1524.	3109.	-5.5	-0.2	5.5	88.
10.5	1600.	3185.	-2.9	0.3	2.9	97.
11.0	1676.	3261.	-2.7	0.3	2.7	97.
11.5	1753.	3338.	-0.8	1.1	1.4	144.
12.0	1829.	3414.	-1.5	1.2	2.0	128.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4882

DATE 06/24/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		11.46		0.0		3.6	180.
1.0	150	1735	12.10	0.64	3.58	6.51	1.0	178.
2.0	300	1885	15.63	3.53	3.55	6.48	4.3	219.
2.7	415.	2000.	16.00	0.36	0.18	3.10	4.8	219.
3.3	500	2085	15.74	-0.25	-1.06	1.87	5.6	216.
6.0	915.	2500.	13.83	-1.64	-0.71	2.21	2.7	202.
9.3	1415.	3000.	12.19	-1.91	-0.54	2.39	2.7	118.
15.6	2415.	4000.	4.40	-7.80	-2.78	0.14		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4882

DATE 06/24/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	3.6	3.6	180.
0.5	76.	1661.	-2.1	1.6	2.6	188.
1.0	152.	1737.	-0.0	0.9	0.9	179.
1.5	229.	1814.	0.5	2.1	2.1	193.
2.0	305.	1890.	2.9	3.4	4.4	221.
2.5	381.	1966.	3.4	4.0	5.2	220.
3.0	457.	2042.	2.6	3.4	4.3	218.
3.5	533.	2118.	3.7	5.5	6.7	214.
4.0	610.	2195.	2.5	3.8	4.5	211.
4.5	686.	2271.	3.5	5.2	7.1	209.
5.0	762.	2347.	2.2	5.2	5.6	203.
5.5	838.	2423.	1.2	2.8	3.1	203.
6.0	914.	2499.	1.0	2.5	2.7	202.
6.5	991.	2576.	0.6	1.7	1.8	199.
7.0	1067.	2652.	0.0	0.8	0.8	181.
7.5	1143.	2728.	-0.6	0.3	0.7	118.
8.0	1219.	2804.	-0.1	1.2	1.2	175.
8.5	1295.	2880.	-1.7	1.0	1.9	120.
9.0	1372.	2957.	-2.7	1.1	2.9	113.
9.5	1448.	3033.	-2.2	1.3	2.6	121.
10.0	1524.	3109.	-2.1	1.0	2.3	115.
10.5	1600.	3185.	-2.2	1.0	2.4	115.
11.0	1676.	3261.	-1.9	0.9	2.1	114.
11.5	1753.	3338.	-1.9	1.8	2.6	134.
12.0	1830.	3415.	-2.1	1.5	2.6	125.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4884

DATE 06/24/77 TIME 14:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LARSE	WS M/S	WD DEG
	SFC		31.33		0.0		4.1	360.
0.8	150	1735	28.85	-2.48	-3.98	-1.05	7.4	145.
1.6	300	1885	27.48	-1.37	-2.68	0.25	5.9	11.
2.3	415.	2000.	26.12	-1.34	-3.02	-0.10	6.3	6.
2.8	500	2085	25.60	-0.53	-1.86	1.07	8.0	8.
5.6	915.	2500.	22.14	-3.02	-2.06	0.86	8.9	9.
8.3	1415.	3000.	18.43	-4.15	-2.63	0.29	10.4	5.
12.8	2415.	4000.	7.96	-10.47	-5.86	-2.93		
18.2	3415.	5000.	1.60	-6.36	0.0	2.93		
23.9	4415.	6000.	-5.16	-6.76	-5.57	-2.64		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4884

DATE 06/24/77 TIME 14:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	0.0	-4.1	4.1	360.
0.5	76.	1661.	0.6	-4.6	4.7	353.
1.0	200.	1785.	-0.8	-9.2	9.2	5.
1.5	288.	1873.	-1.2	-5.7	5.8	12.
2.0	365.	1950.	-0.4	-6.5	6.5	4.
2.5	450.	2035.	-0.8	-6.0	6.1	7.
3.0	526.	2111.	-1.4	-8.9	9.0	9.
3.5	602.	2187.	-1.7	-10.0	10.1	10.
4.0	679.	2264.	-1.2	-9.2	9.3	8.
4.5	755.	2340.	-1.3	-8.2	8.3	9.
5.0	831.	2416.	-1.5	-8.1	8.2	11.
5.5	907.	2492.	-1.6	-8.8	8.9	10.
6.0	983.	2568.	-0.3	-8.8	8.8	2.
6.5	1060.	2645.	-1.2	-8.4	8.5	8.
7.0	1170.	2755.	-1.6	-5.0	5.2	18.
7.5	1286.	2871.	-1.6	-10.1	10.2	9.
8.0	1363.	2948.	-0.8	-10.5	10.5	4.
8.5	1439.	3024.	-1.1	-10.3	10.3	6.
9.0	1515.	3100.	-1.8	-8.0	8.2	13.
9.5	1591.	3176.	-2.0	-9.0	9.2	13.
10.0	1667.	3252.	-1.9	-5.4	5.7	19.
10.5	1746.	3331.	-1.4	-1.8	2.3	38.
11.0	1875.	3460.	-2.2	-4.3	4.8	27.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4870

DATE 06/26/77 TIME 04:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		19.85		0.0		1.5	180.
1.0	150	1735	19.32	-0.53	-0.52	2.40	2.2	212.
2.0	300	1885	19.05	-0.27	-1.58	1.35	3.4	174.
2.7	415.	2000.	18.25	-0.71	-1.76	1.17	5.1	192.
3.3	500	2085	17.64	-0.71	-1.76	1.17	5.2	206.
6.0	915.	2500.	14.74	-2.62	-1.61	1.32	7.3	178.
9.3	1415.	3000.	11.91	-3.09	-2.89	0.04	3.1	282.
15.4	2415.	4000.	3.22	-8.70	-2.24	0.69		
21.6	3415.	5000.	-4.86	-8.08	-3.45	-0.82		
27.2	4415.	6000.	-11.26	-6.39	-2.15	0.78		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4870

DATE 06/26/77 TIME 04:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	1.5	1.5	180.
0.5	76.	1661.	1.1	1.4	1.8	218.
1.0	152.	1737.	1.2	1.9	2.2	212.
1.5	229.	1814.	0.4	2.3	2.3	190.
2.0	305.	1890.	-0.4	3.5	3.5	173.
2.5	381.	1966.	0.6	4.8	4.8	187.
3.0	457.	2042.	1.8	5.1	5.4	199.
3.5	533.	2118.	2.7	4.3	5.1	212.
4.0	610.	2195.	4.0	2.3	4.6	240.
4.5	686.	2271.	4.5	1.9	4.9	247.
5.0	762.	2347.	5.4	2.8	6.1	243.
5.5	838.	2423.	6.1	2.6	6.6	247.
6.0	914.	2499.	-0.3	7.3	7.3	178.
6.5	991.	2576.	6.1	3.4	7.0	241.
7.0	1067.	2652.	6.2	3.8	7.3	239.
7.5	1143.	2728.	14.6	-4.7	15.4	288.
8.0	1219.	2804.	6.0	2.8	6.6	245.
8.5	1295.	2880.	4.5	1.3	4.7	254.
9.0	1372.	2957.	3.9	1.4	4.1	250.
9.5	1448.	3033.	1.9	-1.4	2.3	306.
10.0	1524.	3109.	1.7	-0.7	1.8	292.
10.5	1600.	3185.	3.0	-0.4	3.0	278.
11.0	1678.	3263.	4.4	-1.8	4.7	292.
11.5	1757.	3342.	4.2	-2.3	4.8	299.
12.0	1839.	3424.	3.8	-3.2	5.0	310.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4864

DATE 06/26/77 TIME 14:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		32.15		0.0		5.1	360.
0.7	150	1735	28.93	-3.23	-4.64	-1.71	1.8	304.
1.3	300	1885	27.82	-1.11	-3.84	-0.91	1.6	287.
1.9	415.	2000.	26.46	-1.34	-2.35	0.58	0.7	267.
2.4	500	2085	26.12	-0.36	-2.02	0.91	1.4	281.
5.1	915.	?2500.	22.67	-3.45	-2.06	0.86	2.2	244.
8.4	1415.	?3000.	19.41	-3.26	-2.45	0.48	5.8	284.
14.9	2415.	4000.	12.10	-7.31	0.36	3.29		
21.5	3415.	5000.	8.21	-3.88	-2.20	0.73		
27.5	4415.	6000.	1.02	-7.19	-3.58	-0.65		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4864

DATE 06/26/77 TIME 14:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	0.0	-5.1	5.1	360.
0.5	76.	1661.	1.1	-0.8	1.4	307.
1.0	243.	1828.	2.0	-1.2	2.3	301.
1.5	349.	1934.	1.0	-0.1	1.0	274.
2.0	436.	2021.	0.6	0.1	0.6	265.
2.5	512.	2097.	1.4	-0.4	1.5	284.
3.0	588.	2173.	2.2	-0.5	2.2	284.
3.5	664.	2249.	3.2	-0.3	3.2	276.
4.0	740.	2325.	2.7	-0.3	2.7	275.
4.5	820.	2405.	2.4	0.5	2.4	259.
5.0	896.	2481.	1.9	0.7	2.0	251.
5.5	972.	2557.	1.8	1.8	2.5	226.
6.0	1048.	2633.	2.3	-1.3	2.6	300.
6.5	1124.	2709.	2.2	5.6	6.1	201.
7.0	1201.	2786.	4.0	0.7	4.1	260.
7.5	1277.	2862.	4.7	-0.2	4.8	273.
8.0	1353.	2938.	5.8	-1.0	5.9	280.
8.5	1429.	3014.	5.7	-1.4	5.8	284.
9.0	1505.	3090.	4.1	2.8	5.0	235.
9.5	1582.	3167.	7.2	-7.2	10.2	315.
10.0	1658.	3243.	6.1	-3.0	6.9	296.
10.5	1734.	3319.	6.0	-2.5	6.5	293.
11.0	1810.	3395.	15.2	-4.2	15.8	285.
11.5	1886.	3471.	2.9	-2.1	3.6	306.
12.0	1963.	3548.	2.9	-1.6	3.3	299.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4871

DATE 06/28/77 TIME 04:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.74		0.0		5.1	155.
1.0	150	1735	15.91	2.17	2.84	5.77	5.0	163.
2.0	300	1885	16.01	0.10	-1.06	1.86	2.3	211.
2.7	415.	2000.	15.83	-0.10	-0.53	2.39	1.4	173.
3.3	500	2085	15.66	-0.26	-0.36	2.57	1.8	143.
6.0	915.	2500.	13.74	-1.73	-1.79	1.13	5.5	87.
9.3	1415.	3000.	12.28	-1.65	-0.90	2.02	0.8	66.
15.8	2415.	4000.	6.34	-5.94	-1.11	1.82		
22.4	3415.	5000.	-0.03	-6.37	-1.32	1.61		
29.0	4415.	6000.	-5.06	-5.03	-2.88	0.05		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4871

DATE 06/28/77 TIME 04:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	4.7	5.1	155.
0.5	76.	1661.	-1.8	5.0	5.4	160.
1.0	152.	1737.	-1.5	4.8	5.0	163.
1.5	229.	1814.	0.9	1.9	2.1	204.
2.0	305.	1890.	1.2	2.0	2.3	212.
2.5	381.	1966.	-0.1	1.1	1.1	174.
3.0	457.	2042.	-0.2	1.8	1.8	173.
3.5	533.	2118.	-1.6	0.9	1.8	119.
4.0	610.	2195.	-3.0	0.2	3.0	94.
4.5	686.	2271.	-5.3	0.5	5.4	96.
5.0	762.	2347.	-6.3	0.7	6.4	96.
5.5	838.	2423.	-6.6	0.4	6.6	94.
6.0	914.	2499.	-5.5	-0.3	5.5	86.
6.5	991.	2576.	-8.0	1.4	8.1	100.
7.0	1067.	2652.	-7.2	0.8	7.3	97.
7.5	1143.	2728.	-6.2	1.4	6.3	103.
8.0	1219.	2804.	-3.6	1.7	4.0	115.
8.5	1295.	2880.	-1.8	1.1	2.1	120.
9.0	1372.	2957.	-1.1	0.1	1.1	96.
9.5	1448.	3033.	-0.4	-0.4	0.6	43.
10.0	1524.	3109.	-1.2	-0.2	1.2	81.
10.5	1600.	3185.	-1.5	-0.7	1.6	65.
11.0	1676.	3261.	-1.4	-1.1	1.8	54.
11.5	1753.	3338.	-1.6	-1.3	2.1	50.
12.0	1829.	3414.	-1.4	-1.5	2.1	43.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4866

DATE 06/28/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		33.79		0.0		3.1	215.
0.7	150	1735	29.84	-3.95	-4.62	-1.69	6.0	264.
1.0	300	1885	28.20	-1.65	-2.50	0.43	11.2	274.
1.5	415.	2000.	27.14	-0.60	-3.01	-0.08	4.1	284.
2.1	500	2085	26.98	-0.62	-3.02	-0.10	3.8	283.
4.8	915.	2500.	24.57	-2.39	-1.70	1.23	7.0	266.
8.1	1415.	3000.	22.05	-2.80	0.0	2.93	9.3	272.
14.7	2415.	4000.	18.07	-3.71	-1.76	1.19		
20.9	3415.	5000.	12.10	-5.98	-2.16	0.76		
25.6	4415.	6000.	2.28	-9.81	-2.80	0.13		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4866

DATE 06/28/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	2.5	3.1	215.
0.5	76.	1661.	3.4	0.6	3.4	259.
1.0	299.	1884.	11.2	-0.8	11.3	274.
1.5	410.	1995.	4.0	-1.0	4.2	284.
2.0	487.	2072.	3.5	-1.2	3.7	288.
2.5	563.	2148.	4.0	0.9	4.1	257.
3.0	640.	2225.	4.7	0.9	4.8	259.
3.5	716.	2301.	7.3	0.4	7.3	267.
4.0	792.	2377.	8.5	-0.2	8.5	271.
4.5	868.	2453.	7.8	0.4	7.8	267.
5.0	944.	2529.	6.6	0.4	6.6	266.
5.5	1021.	2606.	7.8	0.7	7.9	265.
6.0	1097.	2682.	9.2	0.4	9.2	267.
6.5	1173.	2758.	13.2	-0.0	13.2	270.
7.0	1249.	2834.	9.8	-0.2	9.8	271.
7.5	1325.	2910.	7.8	0.9	7.8	264.
8.0	1402.	2987.	9.2	-0.0	9.2	270.
8.5	1478.	3063.	9.7	-2.3	9.9	283.
9.0	1554.	3139.	8.7	-2.1	8.9	284.
9.5	1630.	3215.	8.9	-3.7	9.6	293.
10.0	1706.	3291.	6.7	-1.3	6.9	281.
10.5	1783.	3368.	6.7	-2.0	7.0	286.
11.0	1859.	3444.	7.6	-1.9	7.8	284.
11.5	1935.	3520.	8.6	-2.4	8.9	286.
12.0	2011.	3596.	8.8	-1.6	8.9	281.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4867

DATE 06/30/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		12.28		0.0		6.2	135.
1.0	150	1735	14.64	2.36	6.25	9.18	7.4	139.
2.0	300	1885	16.19	1.56	-0.53	2.40	3.1	192.
2.5	415.	2000.	15.83	-0.36	-0.71	2.22	3.6	204.
3.3	500	2085	15.56	-0.27	-0.89	2.04	3.0	216.
6.0	915.	2500.	13.83	-1.63	-1.26	1.67	1.9	198.
9.3	1415.	3000.	11.17	-2.75	-2.18	0.75	1.0	114.
15.8	2415.	4000.	4.36	-6.82	-1.49	1.44		
22.4	3415.	5000.	-0.22	-4.58	-0.19	2.74		
28.7	4415.	6000.	-7.12	-6.89	-3.67	-0.74		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4867

DATE 06/30/77 TIME 04:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-4.4	4.4	6.2	135.
0.5	76.	1661.	-3.8	4.6	6.0	140.
1.0	152.	1737.	-4.8	5.6	7.4	139.
1.5	229.	1814.	-1.8	4.9	5.2	160.
2.0	305.	1890.	0.7	2.9	2.9	194.
2.5	381.	1966.	1.6	3.4	3.8	205.
3.0	457.	2042.	1.3	3.2	3.4	202.
3.5	533.	2118.	1.9	1.8	2.6	227.
4.0	610.	2195.	2.9	1.5	3.3	243.
4.5	686.	2271.	2.6	1.3	2.9	244.
5.0	762.	2347.	1.6	0.2	1.7	263.
5.5	838.	2423.	0.7	1.5	1.5	209.
6.0	914.	2499.	0.6	1.8	1.9	198.
6.5	991.	2576.	0.7	1.3	1.5	209.
7.0	1067.	2652.	-0.5	0.8	0.9	148.
7.5	1143.	2728.	-0.2	0.2	0.2	142.
8.0	1219.	2804.	-0.4	0.4	0.6	131.
8.5	1295.	2880.	-0.6	0.2	0.6	111.
9.0	1372.	2957.	-0.7	0.2	0.7	105.
9.5	1448.	3033.	-1.0	0.6	1.2	121.
10.0	1524.	3109.	-1.0	1.0	1.4	137.
10.5	1600.	3185.	-0.8	1.1	1.3	146.
11.0	1676.	3261.	-0.5	0.9	1.0	150.
11.5	1753.	3338.	-1.0	0.3	1.0	106.
12.0	1834.	3419.	-0.5	0.0	0.6	95.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4875

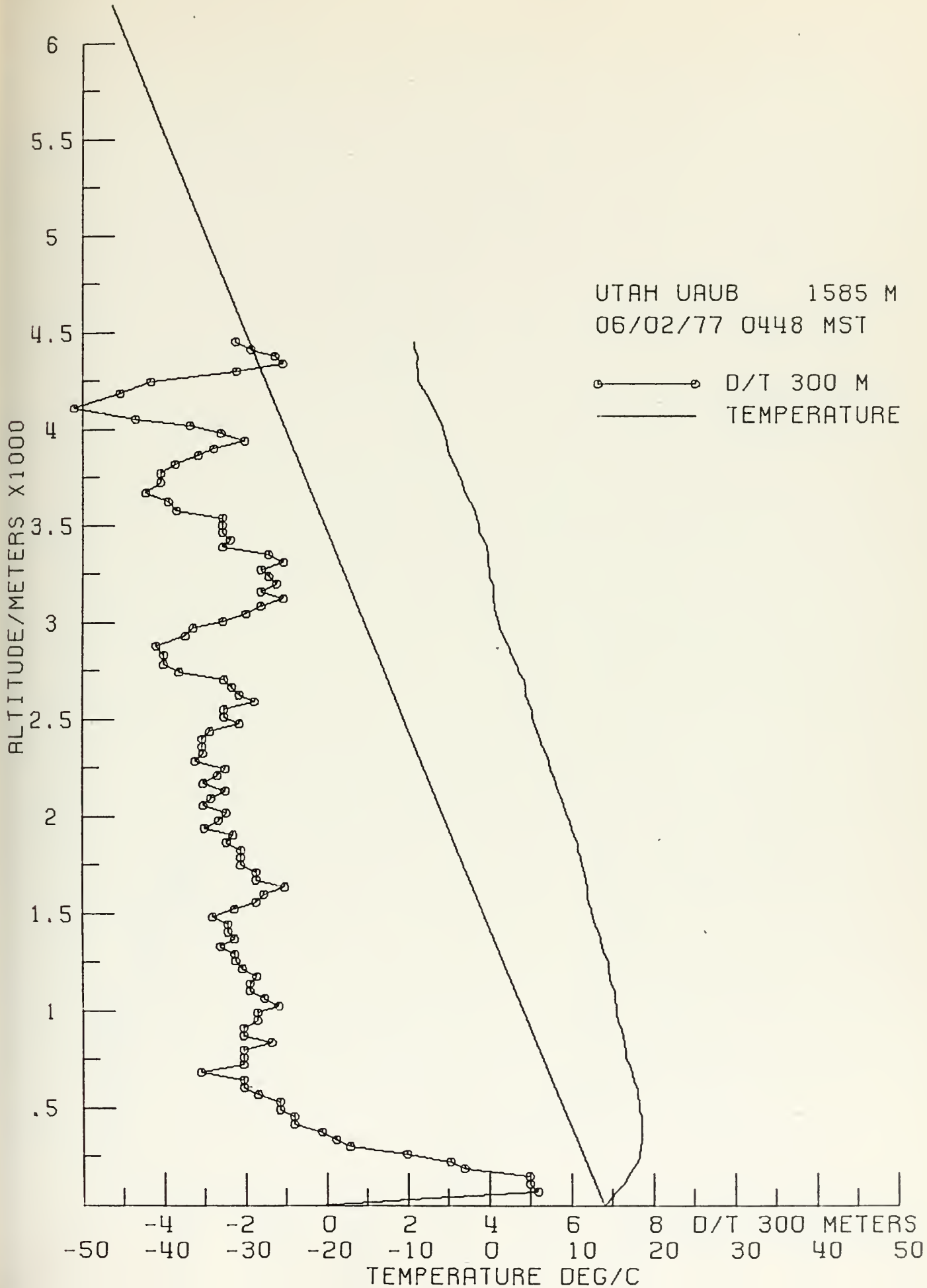
DATE 06/30/77 TIME 14:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		32.56		0.0		7.7	270.
0.7	? 150	1735	29.75	-2.82	-5.44	-2.51	10.5	261.
1.2	300	1885	28.27	-1.48	-5.16	-2.23	10.7	261.
1.7	415.	2000.	26.46	-0.93	-4.52	-1.60	5.8	268.
2.0	500	2085	26.07	-1.27	-3.88	-0.96	4.5	270.
4.4	915.	2500.	22.80	-3.23	-0.86	2.07	8.5	258.
7.6	1415.	3000.	21.79	-0.96	-0.69	2.24	14.7	262.
14.0	2415.	4000.	14.65	-7.23	-5.01	-2.08		
19.7	3415.	5000.	7.27	-7.38	1.84	4.77		
26.1	4415.	6000.	2.55	-4.72	-2.44	0.49		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4875

DATE 06/30/77 TIME 14:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	7.7	0.0	7.7	270.
0.5	76.	1661.	7.5	0.9	7.6	263.
1.0	241.	1826.	13.8	2.9	14.1	258.
1.5	369.	1954.	6.7	0.6	6.7	265.
2.0	489.	2074.	4.2	-0.1	4.2	271.
2.5	598.	2183.	6.6	1.6	6.8	257.
3.0	695.	2280.	5.6	0.5	5.6	265.
3.5	783.	2368.	5.3	0.2	5.3	267.
4.0	859.	2444.	8.4	1.9	8.6	258.
4.5	935.	2520.	8.3	1.8	8.5	258.
5.0	1012.	2597.	10.5	2.5	10.8	257.
5.5	1088.	2673.	13.3	3.0	13.7	257.
6.0	1164.	2749.	14.7	3.1	15.0	258.
6.5	1240.	2825.	20.4	3.2	20.6	261.
7.0	1316.	2901.	10.1	1.8	10.3	260.
7.5	1393.	2978.	14.2	2.0	14.4	262.
8.0	1469.	3054.	15.4	2.4	15.6	261.
8.5	1545.	3130.	19.3	3.0	19.5	261.
9.0	1621.	3206.	9.4	-0.5	9.4	273.
9.5	1697.	3282.	5.0	0.8	5.1	261.
10.0	1774.	3359.	4.8	0.8	4.9	261.
10.5	1850.	3435.	8.6	2.5	8.9	254.
11.0	1926.	3511.	8.6	2.2	8.9	256.
11.5	2002.	3587.	6.9	3.2	7.6	245.
12.0	2078.	3663.	2.0	3.7	4.2	209.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06/02/77 0448 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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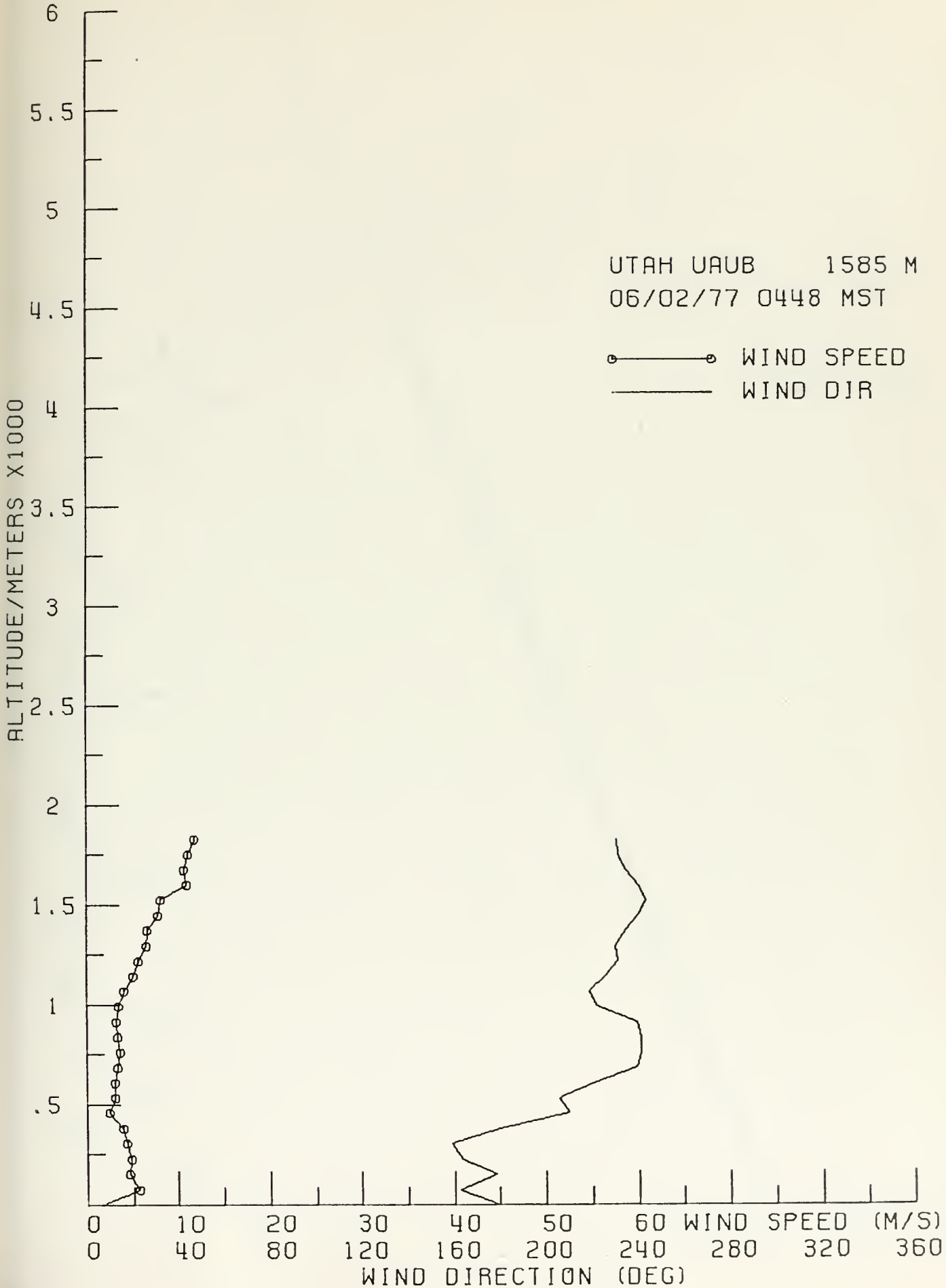
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C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06/02/77 0448 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
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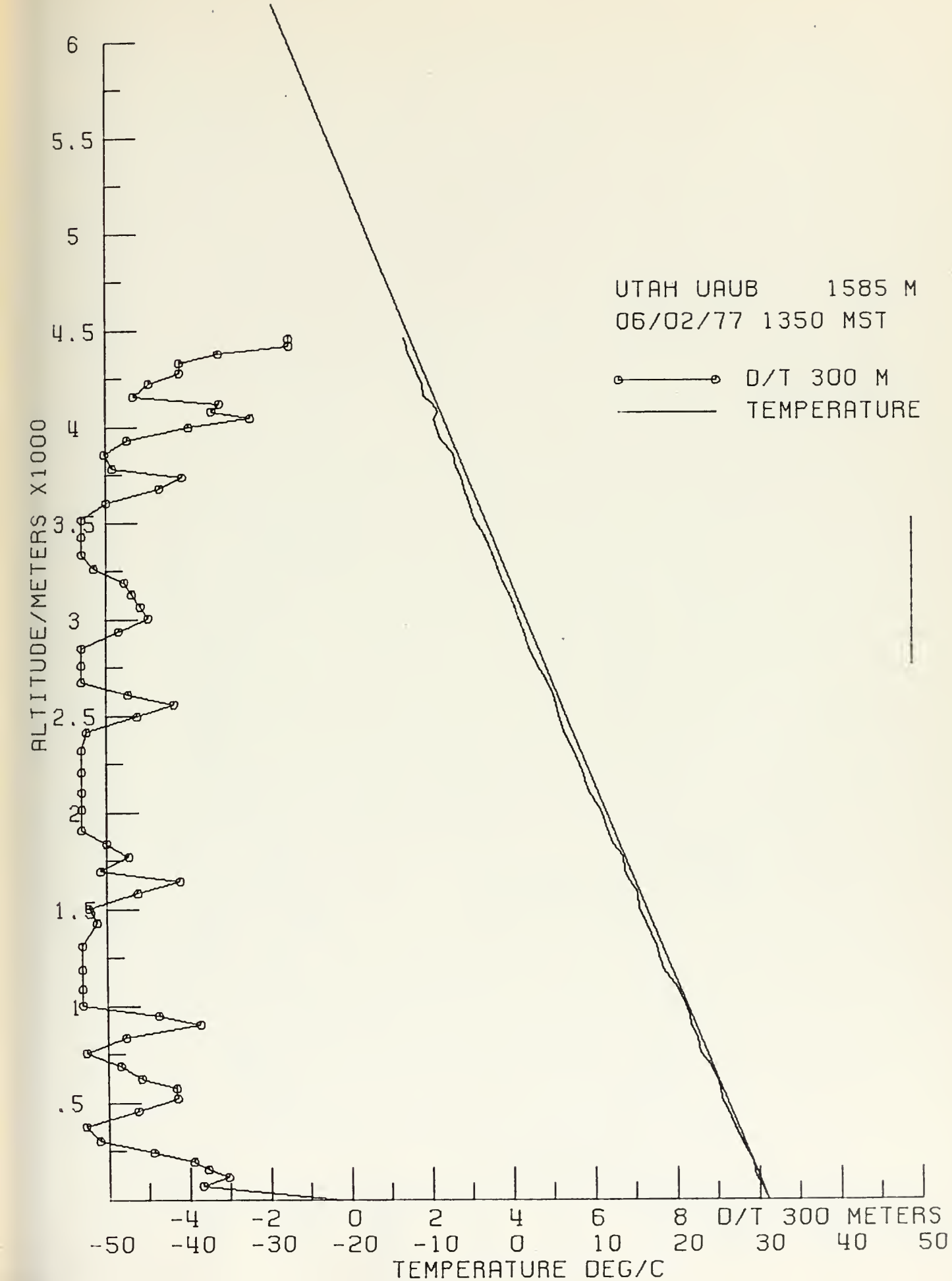
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/02/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
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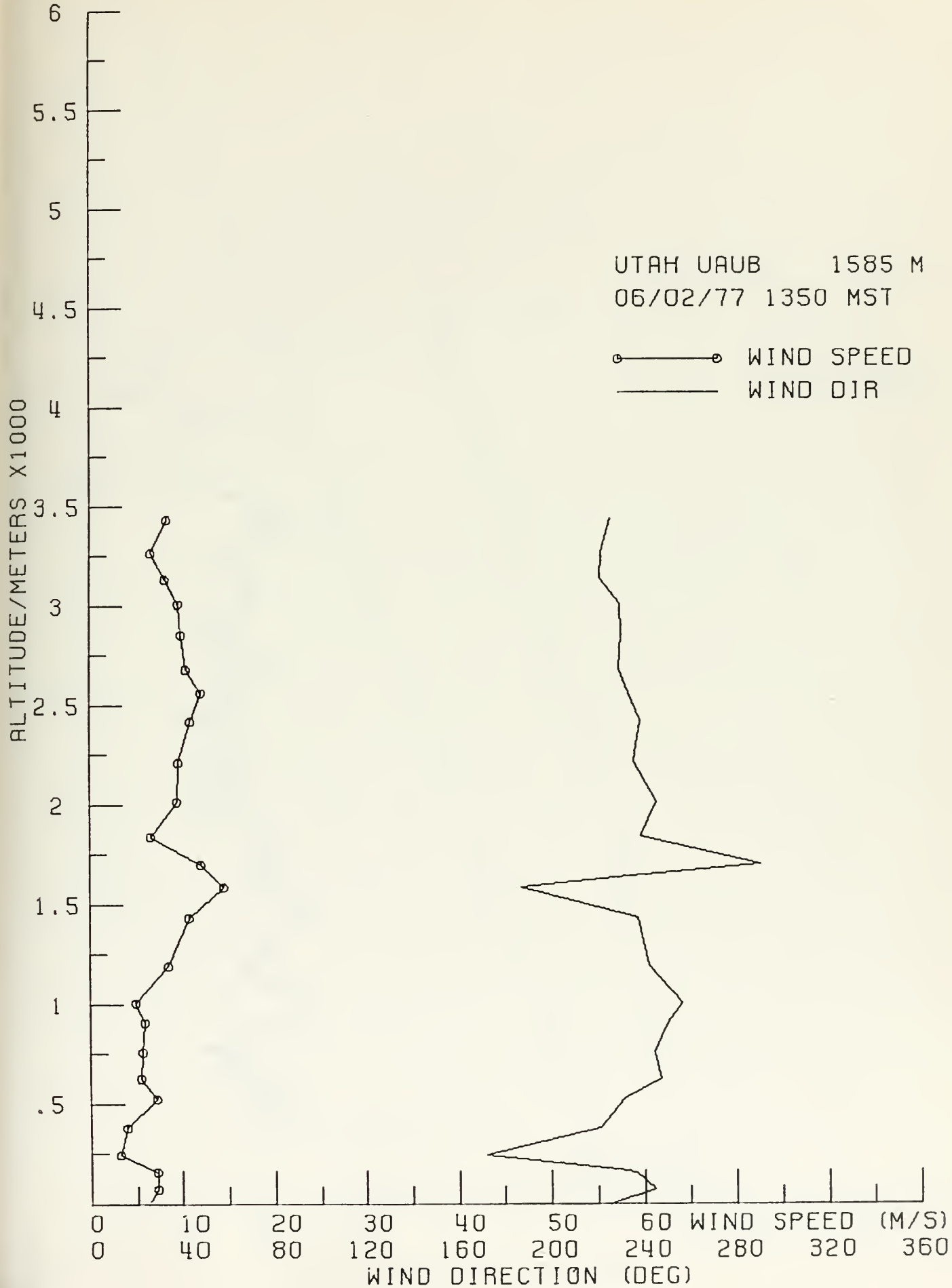
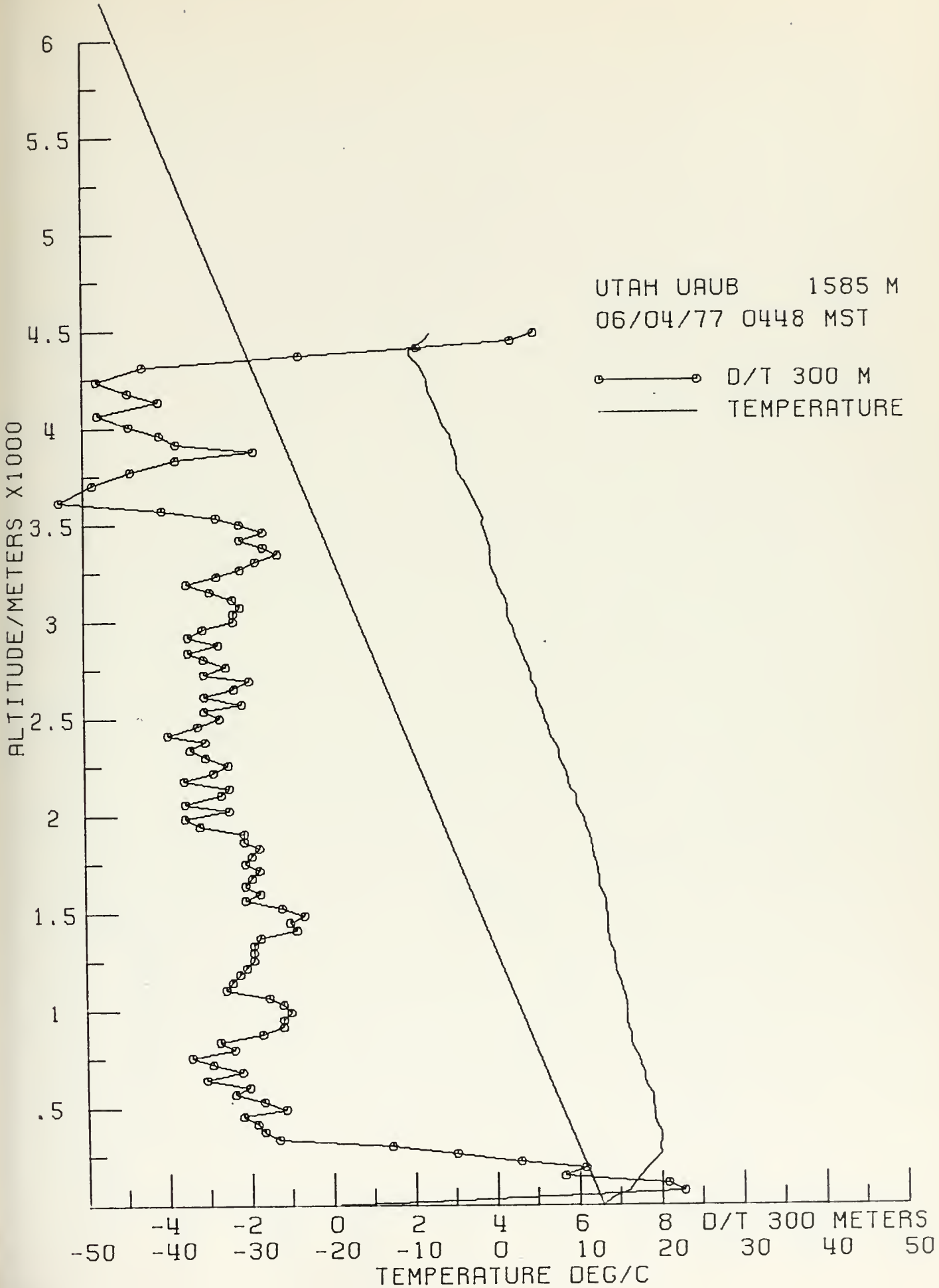
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/02/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/04/77 0448 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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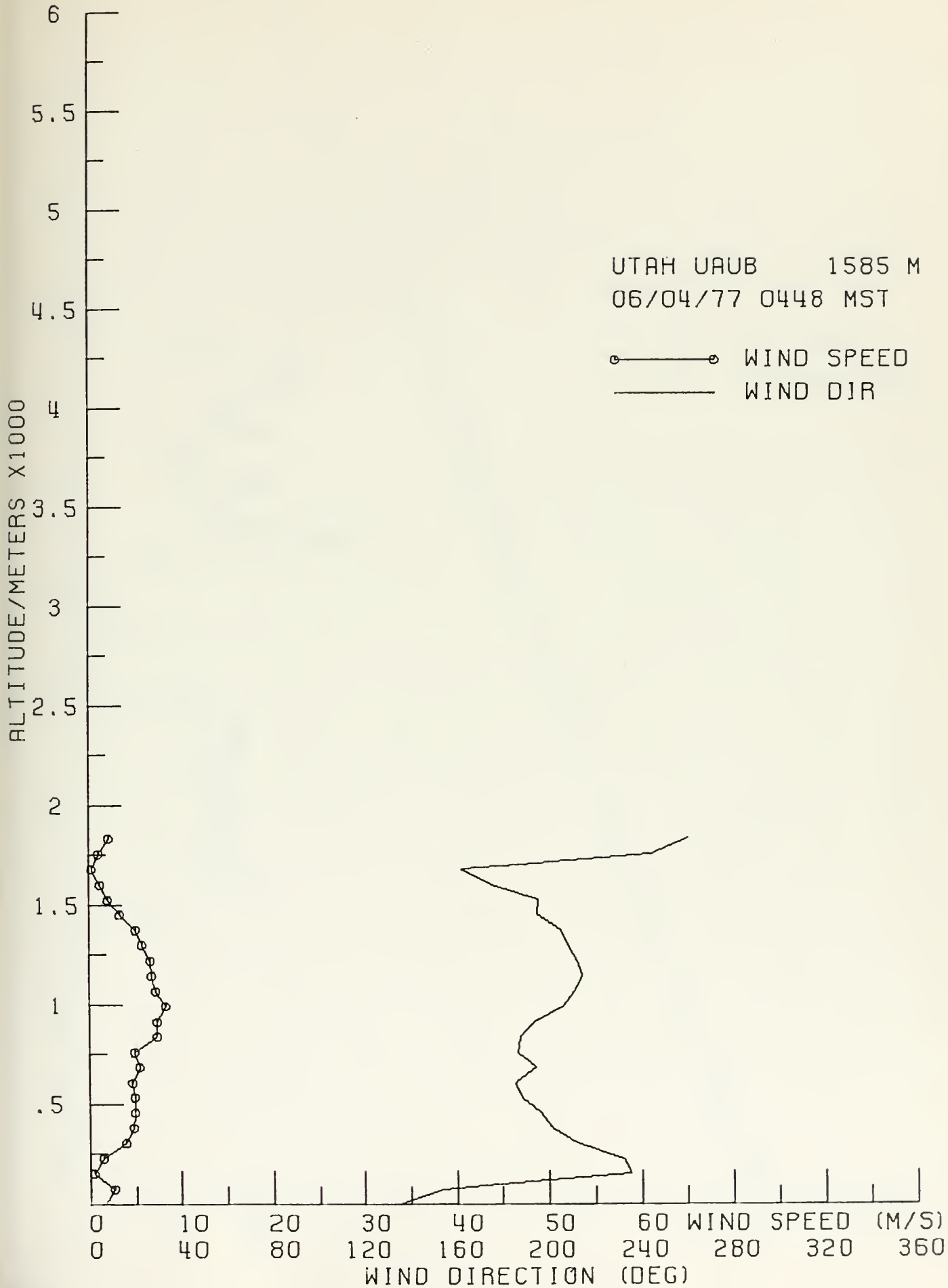
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C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06/04/77 0448 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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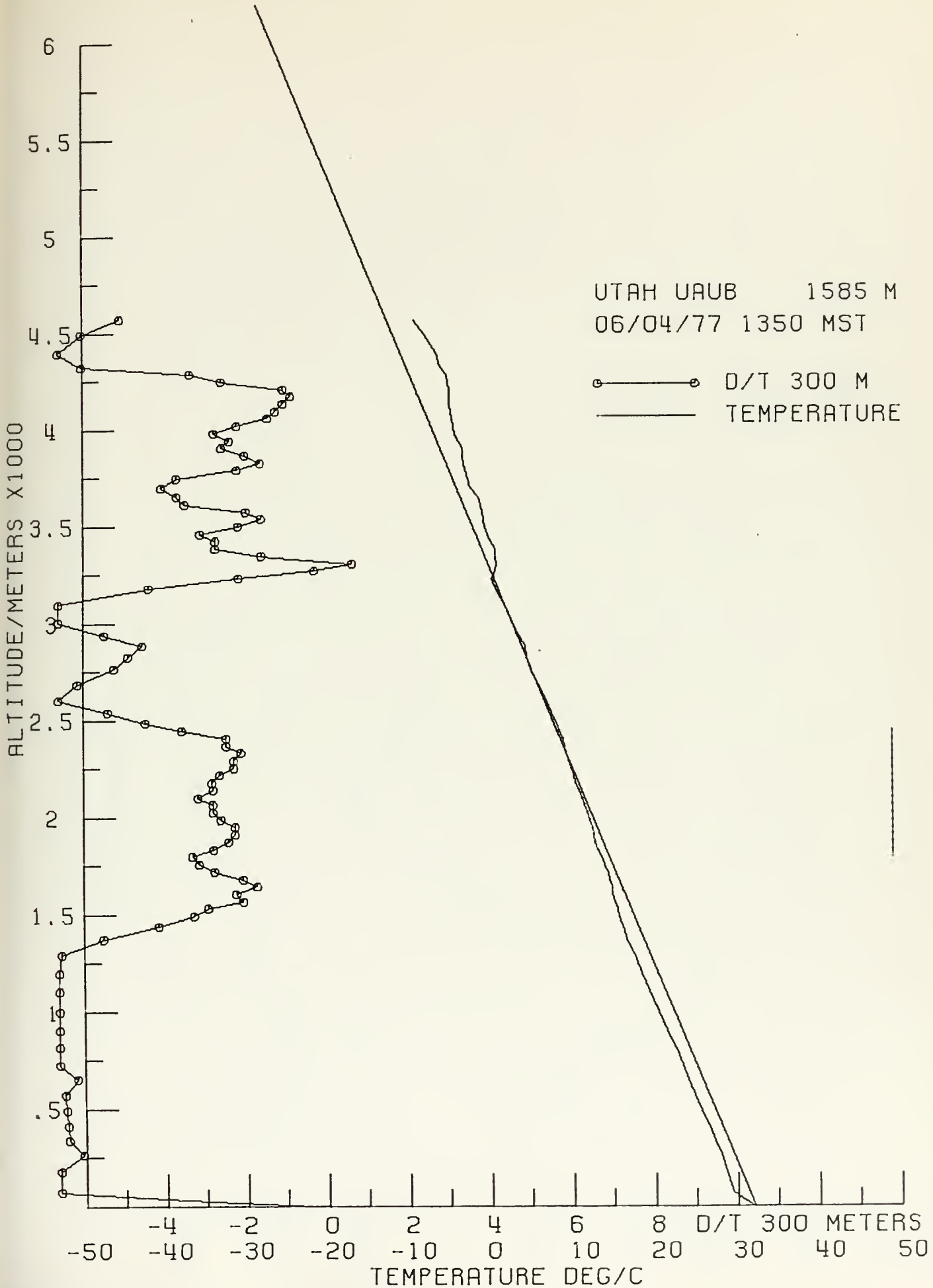
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/04/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
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3.5
3
2.5
2
1.5
1
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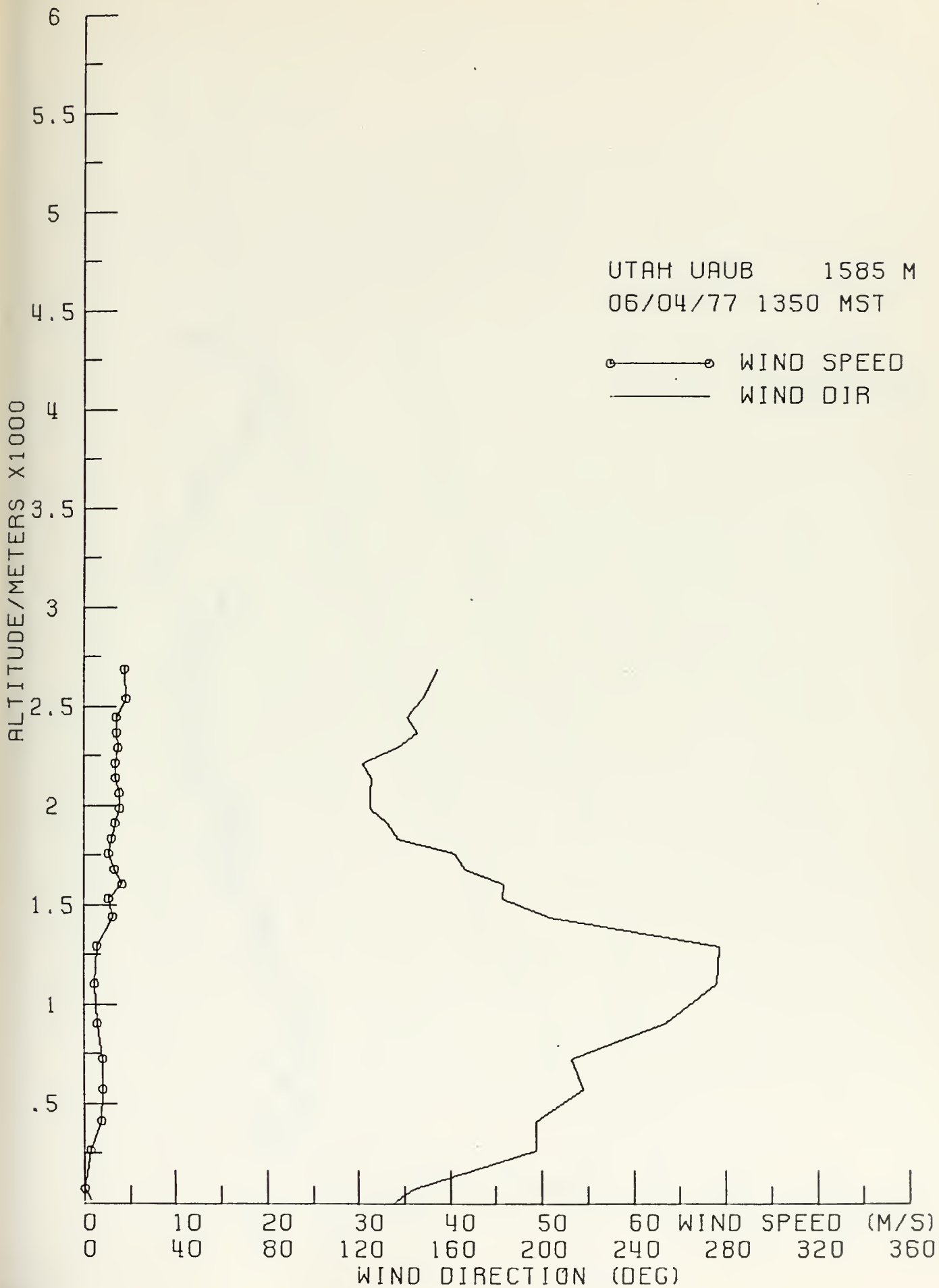
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C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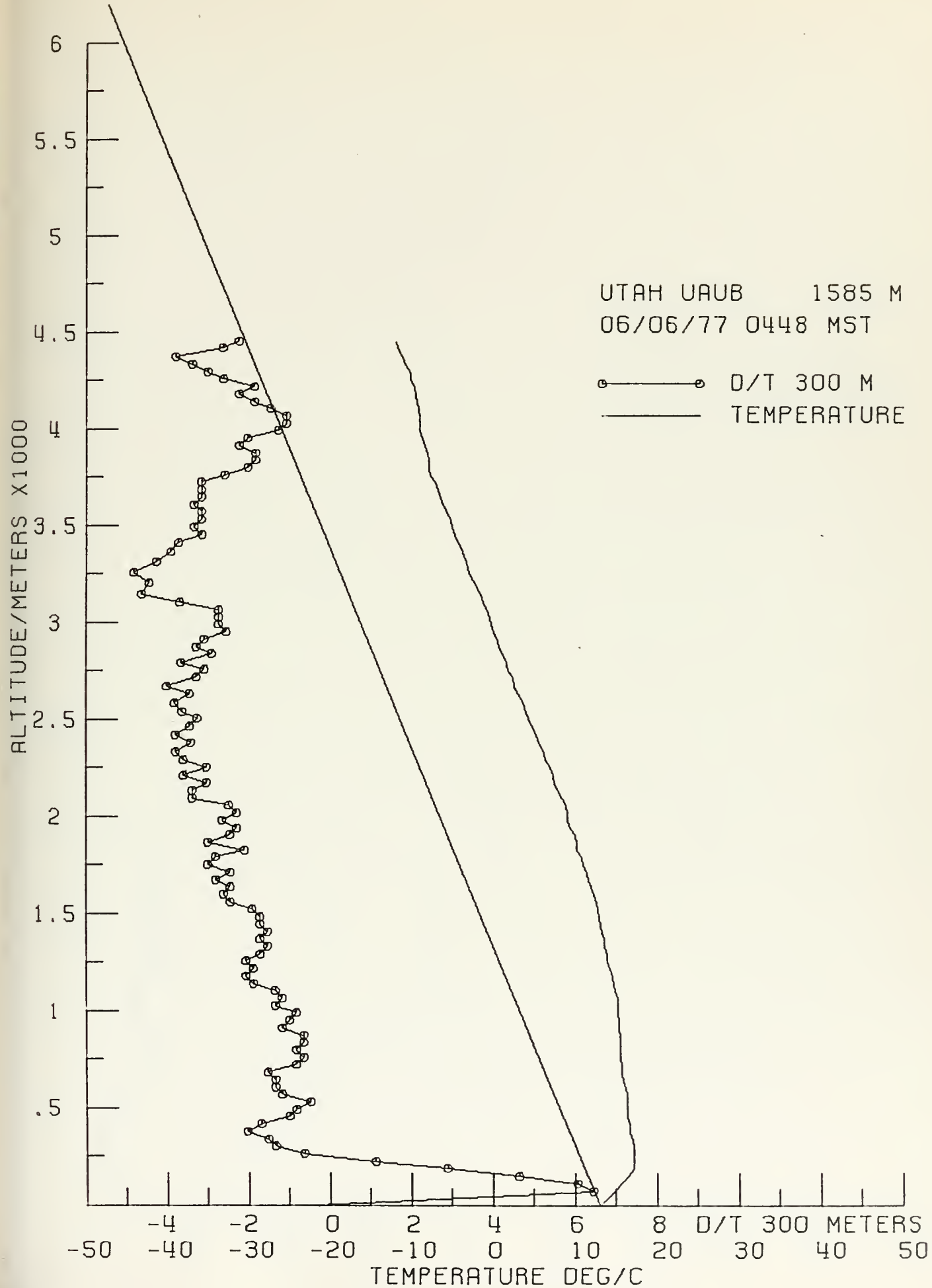
06/04/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/06/77 0448 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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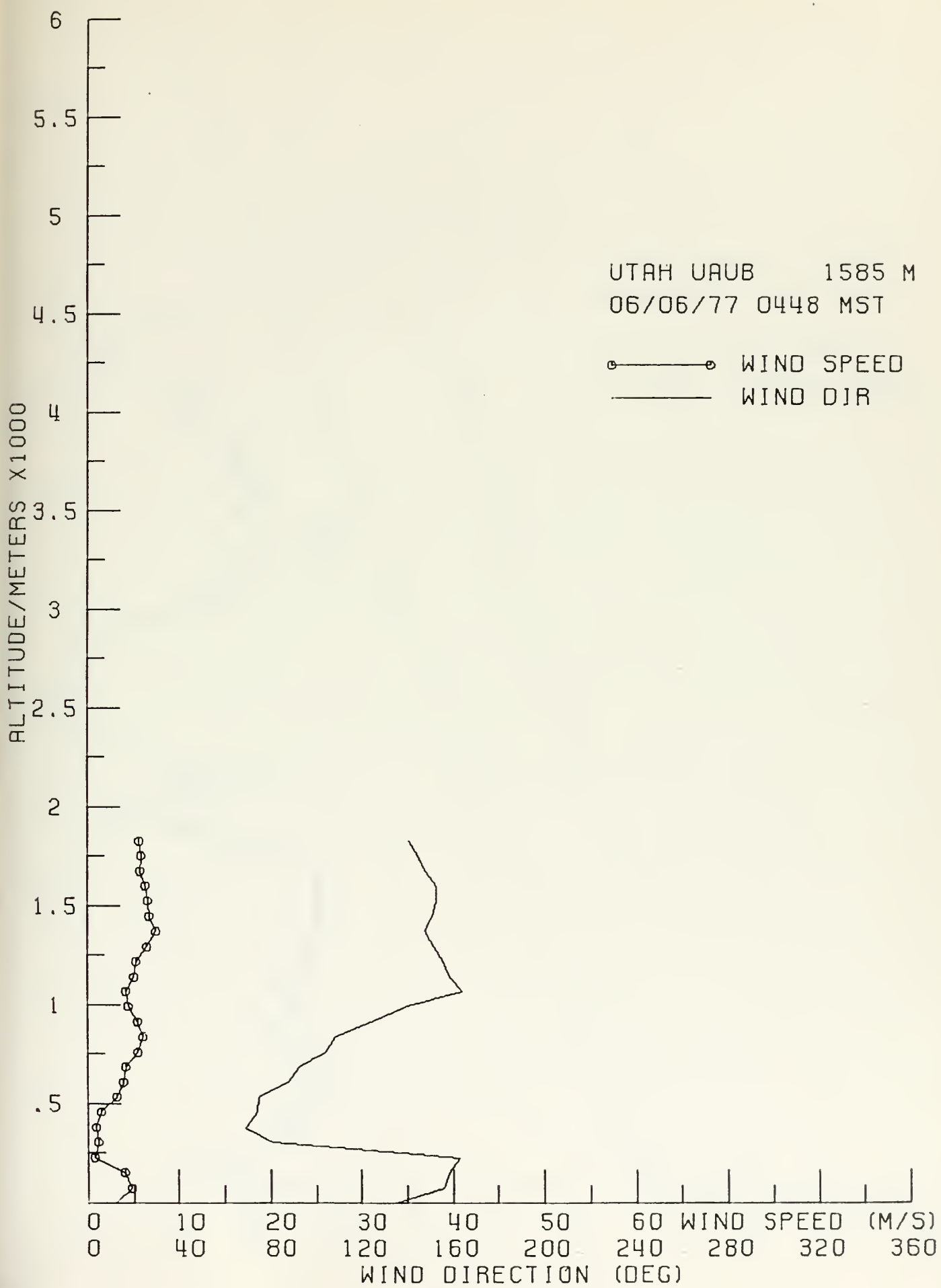
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/06/77 0448 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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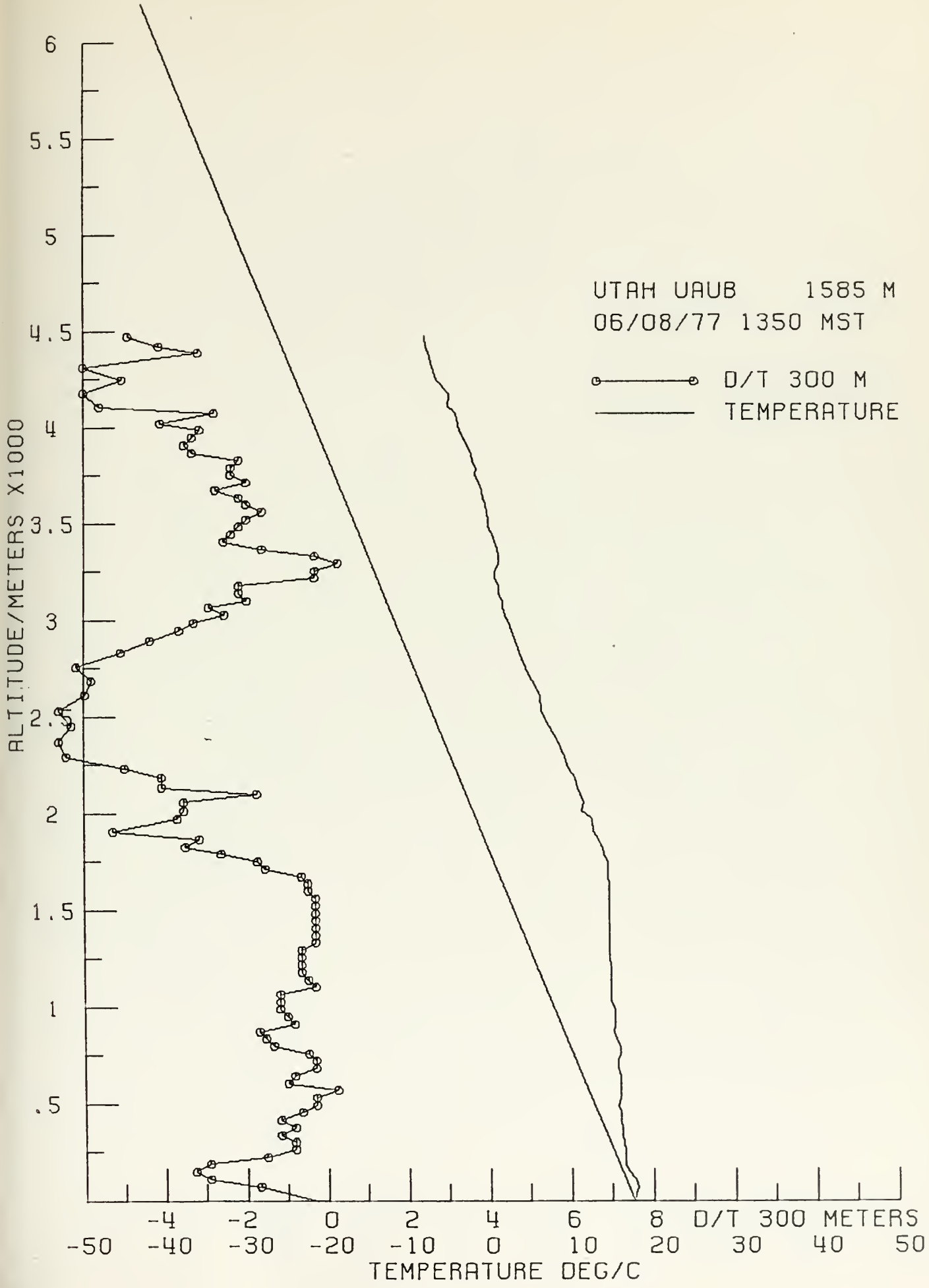
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/08/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
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3.5
3
2.5
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1.5
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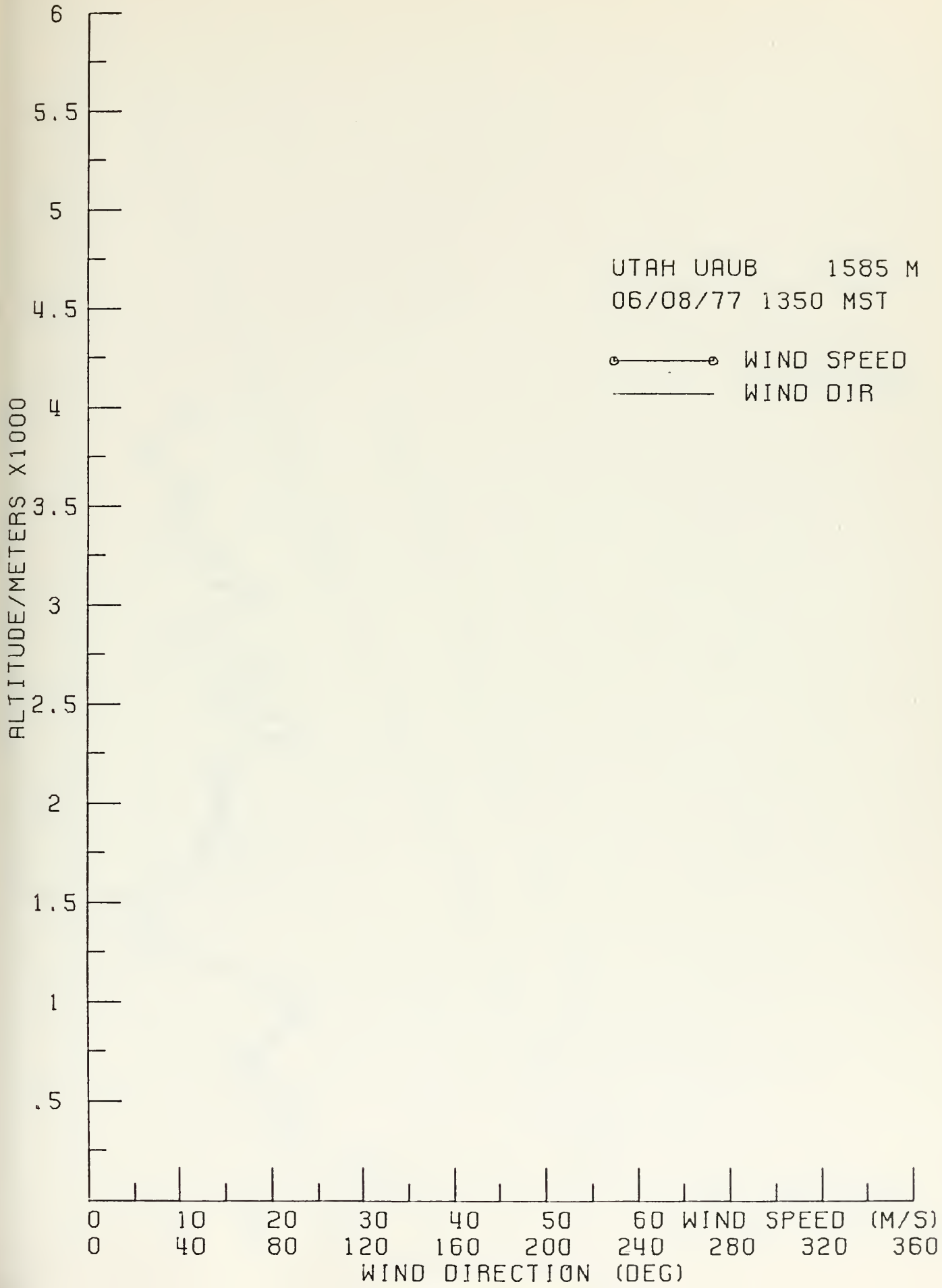
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/08/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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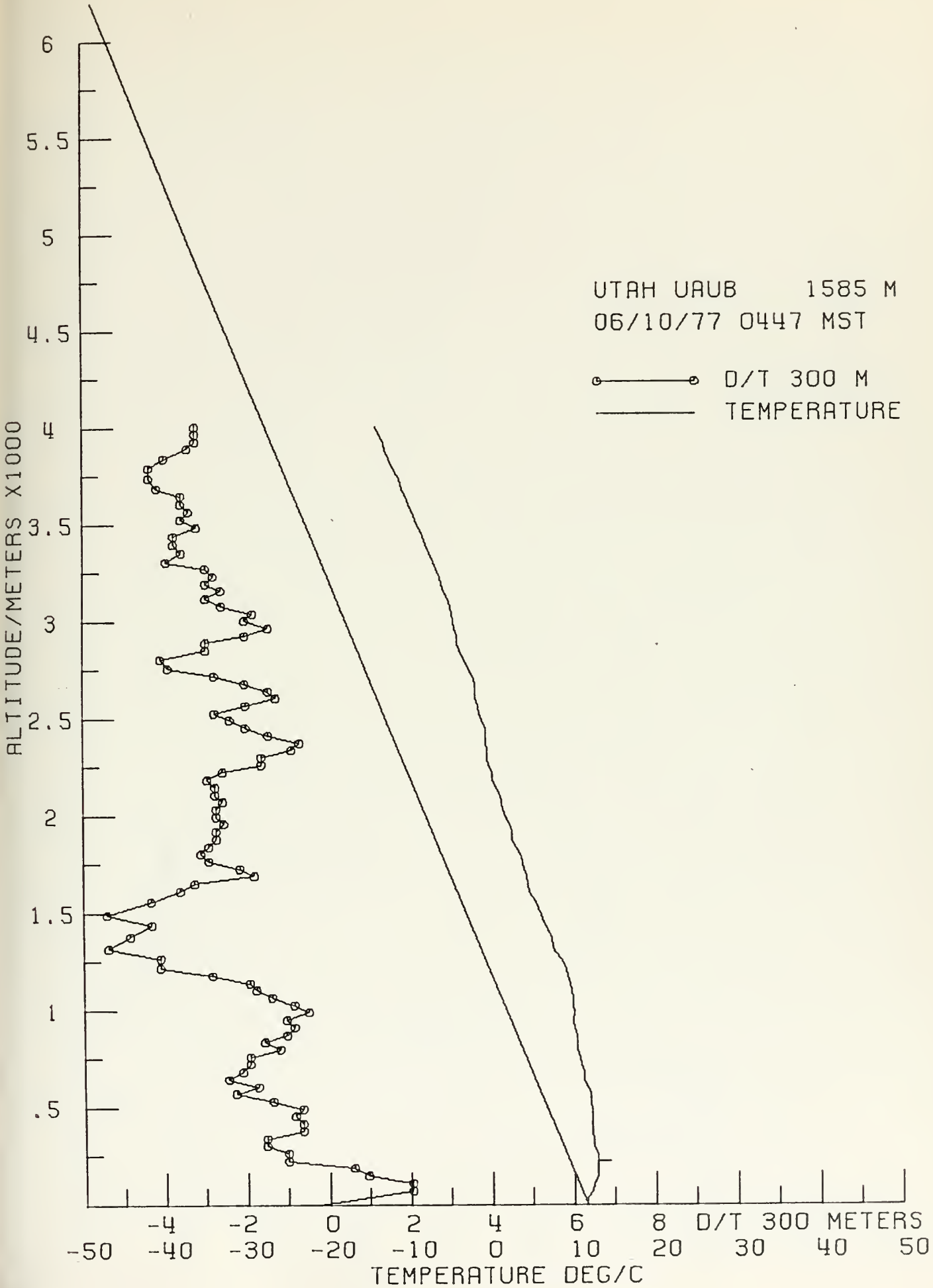
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/10/77 0447 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
2.5
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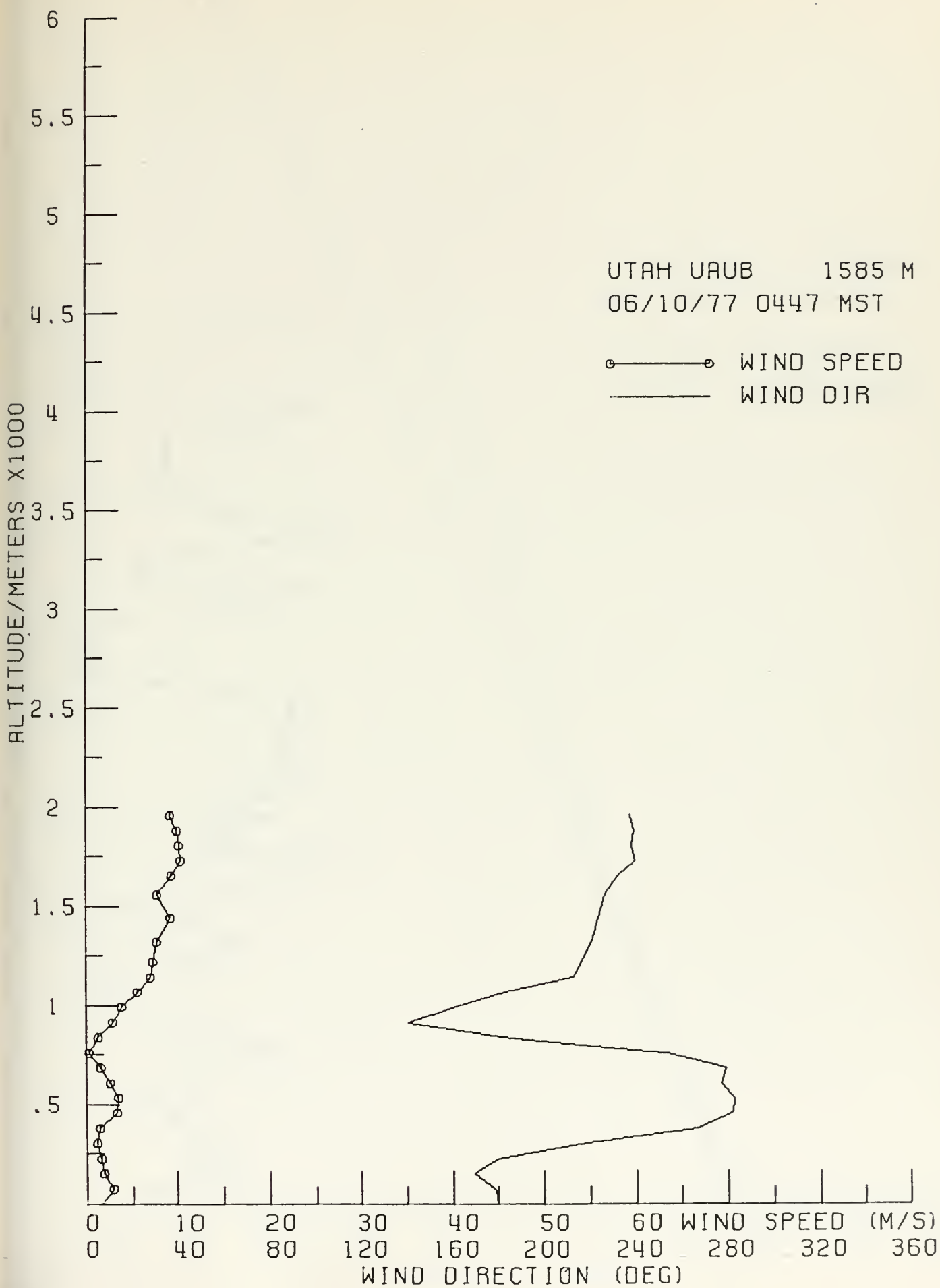
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/10/77 0447 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5
4.5
4
3.5
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1
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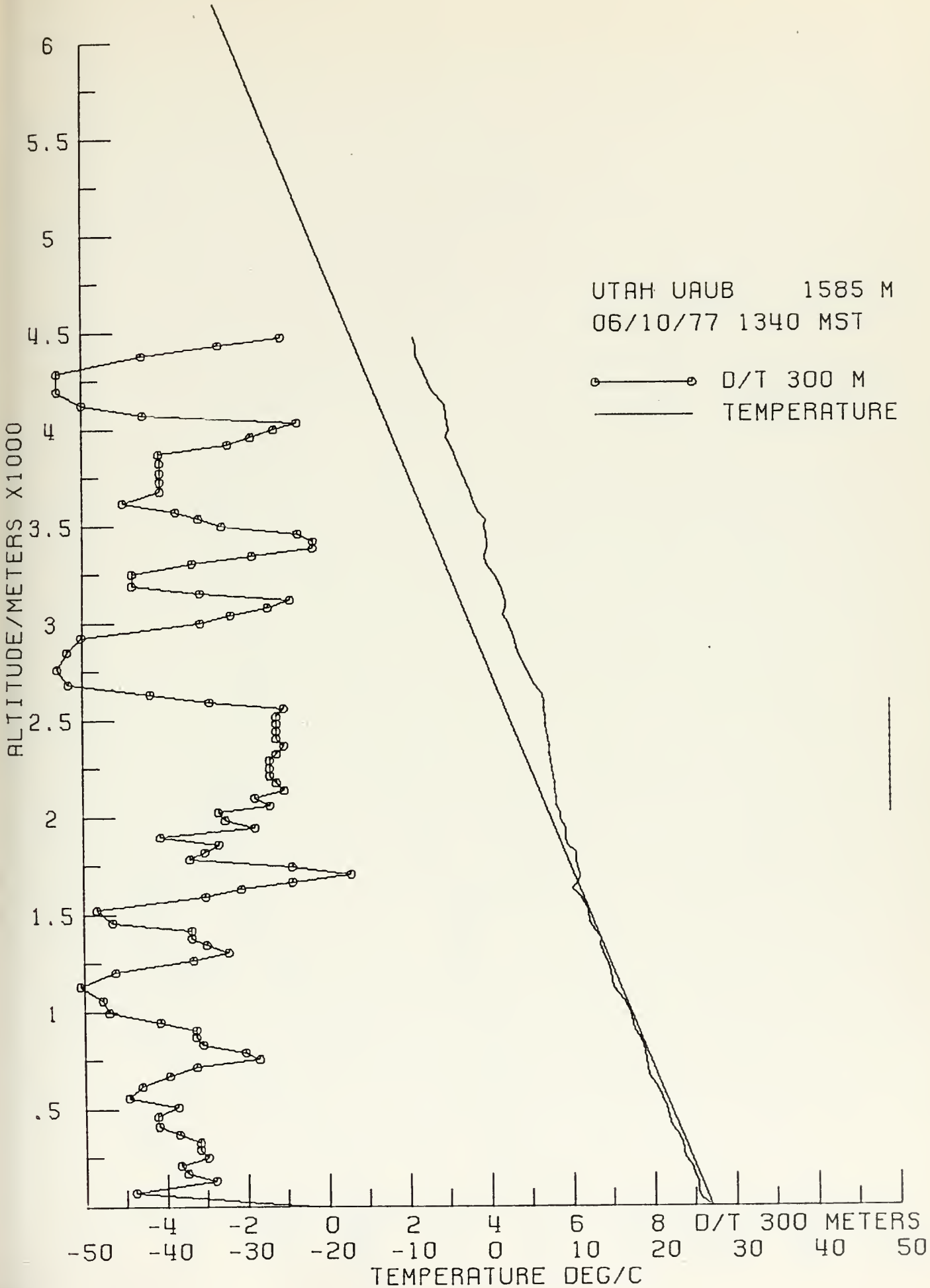
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/10/77 1340 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
3
2.5
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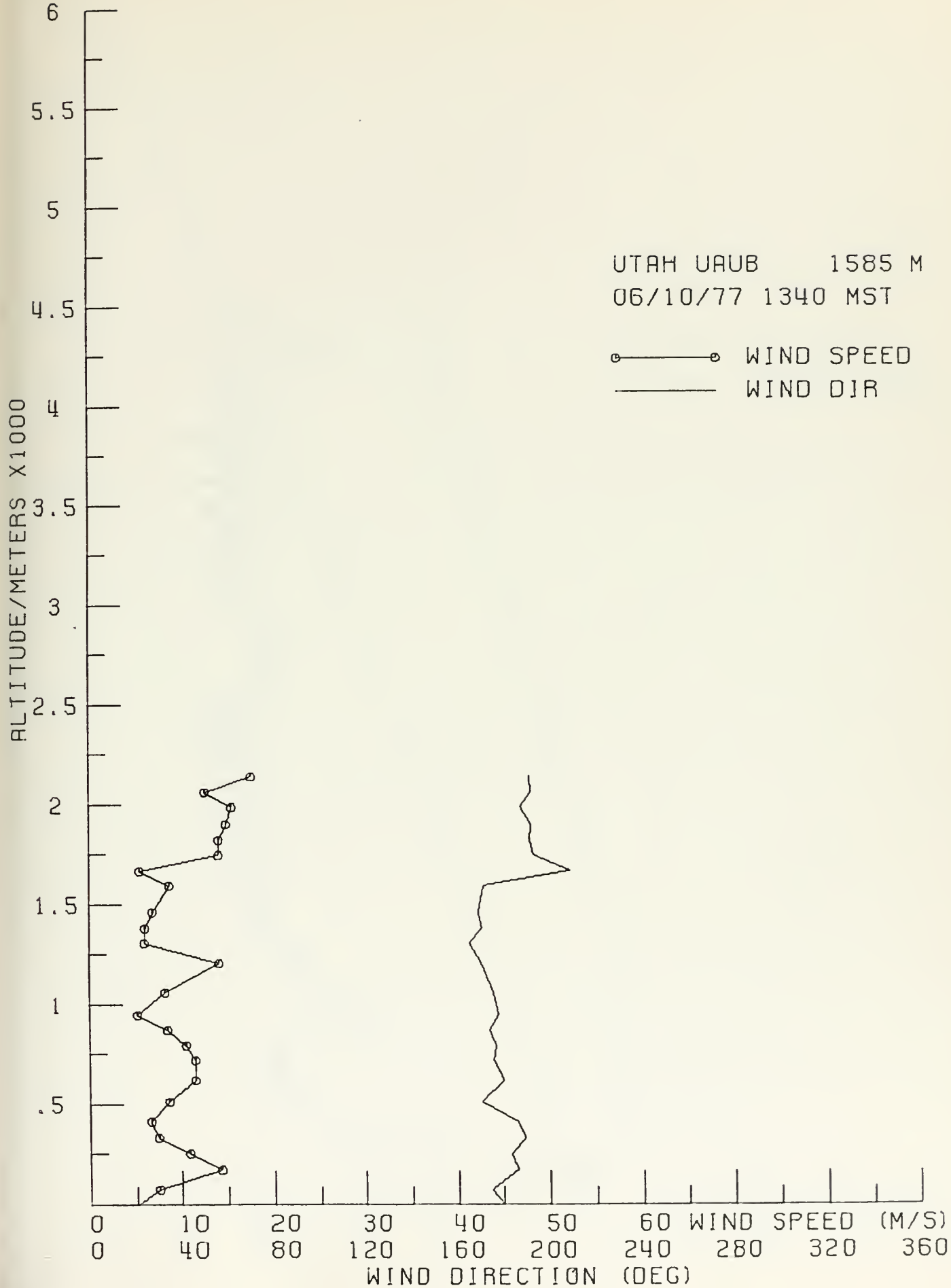
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/10/77 1340 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4
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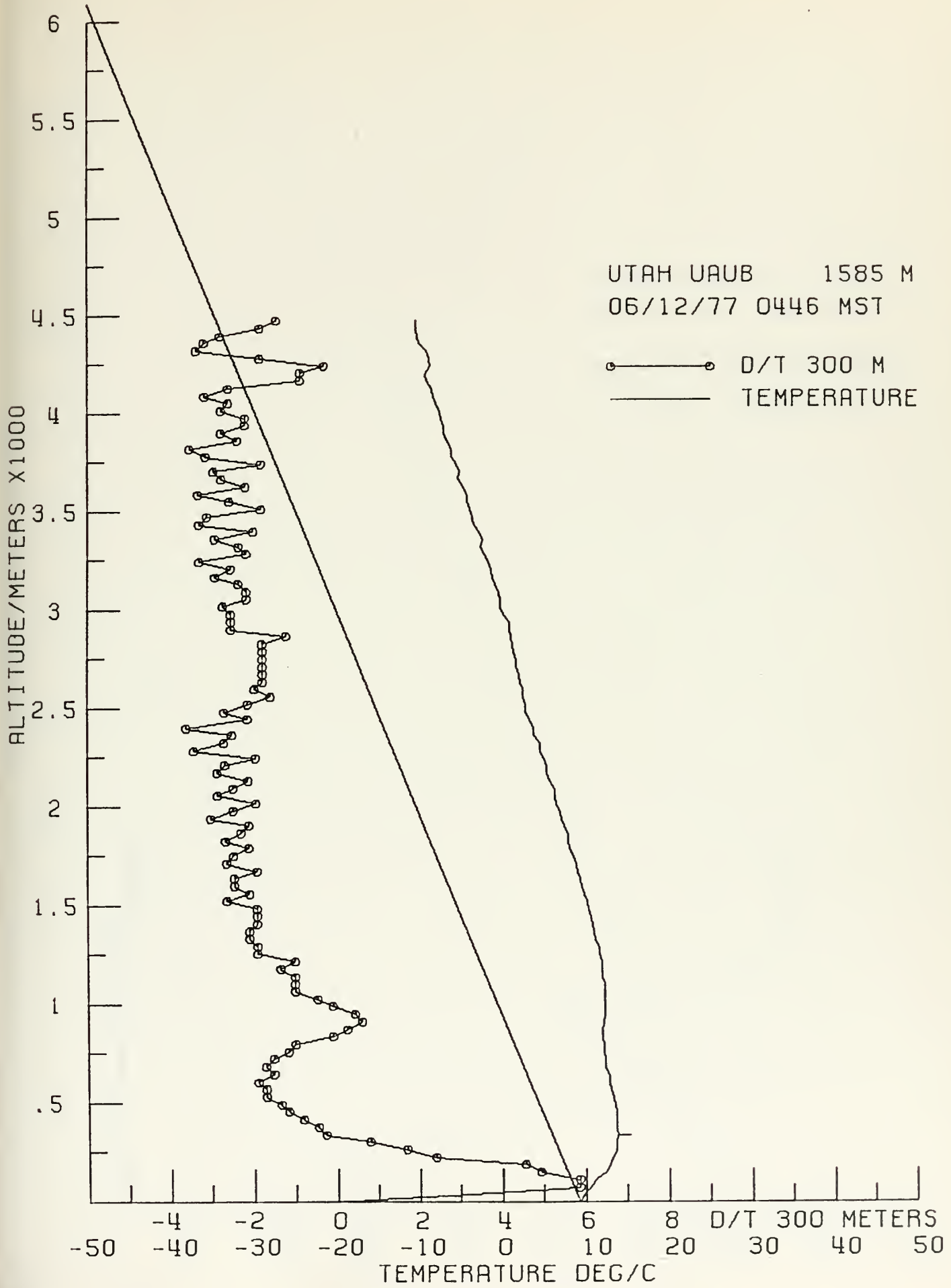
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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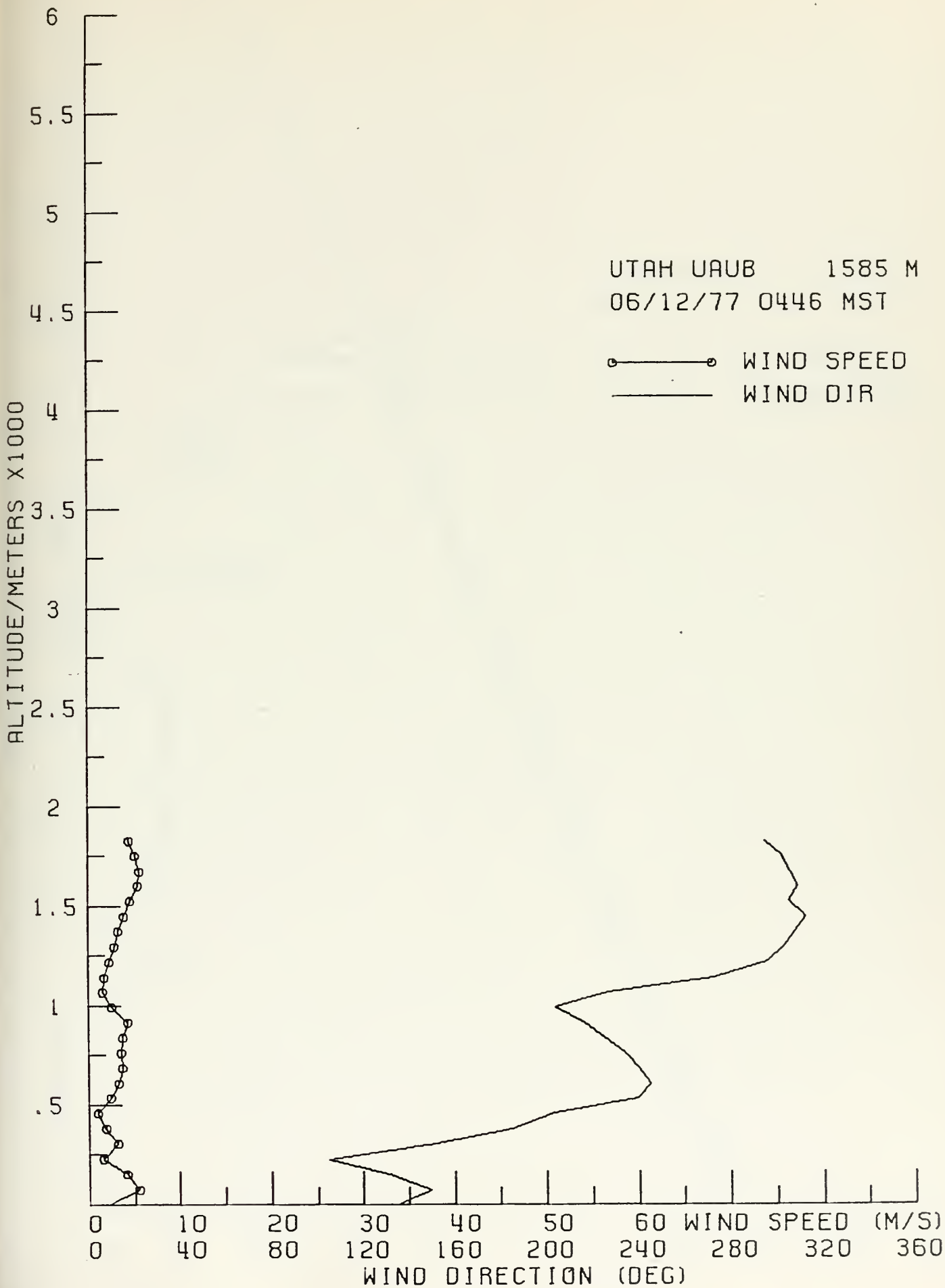
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/12/77 0446 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
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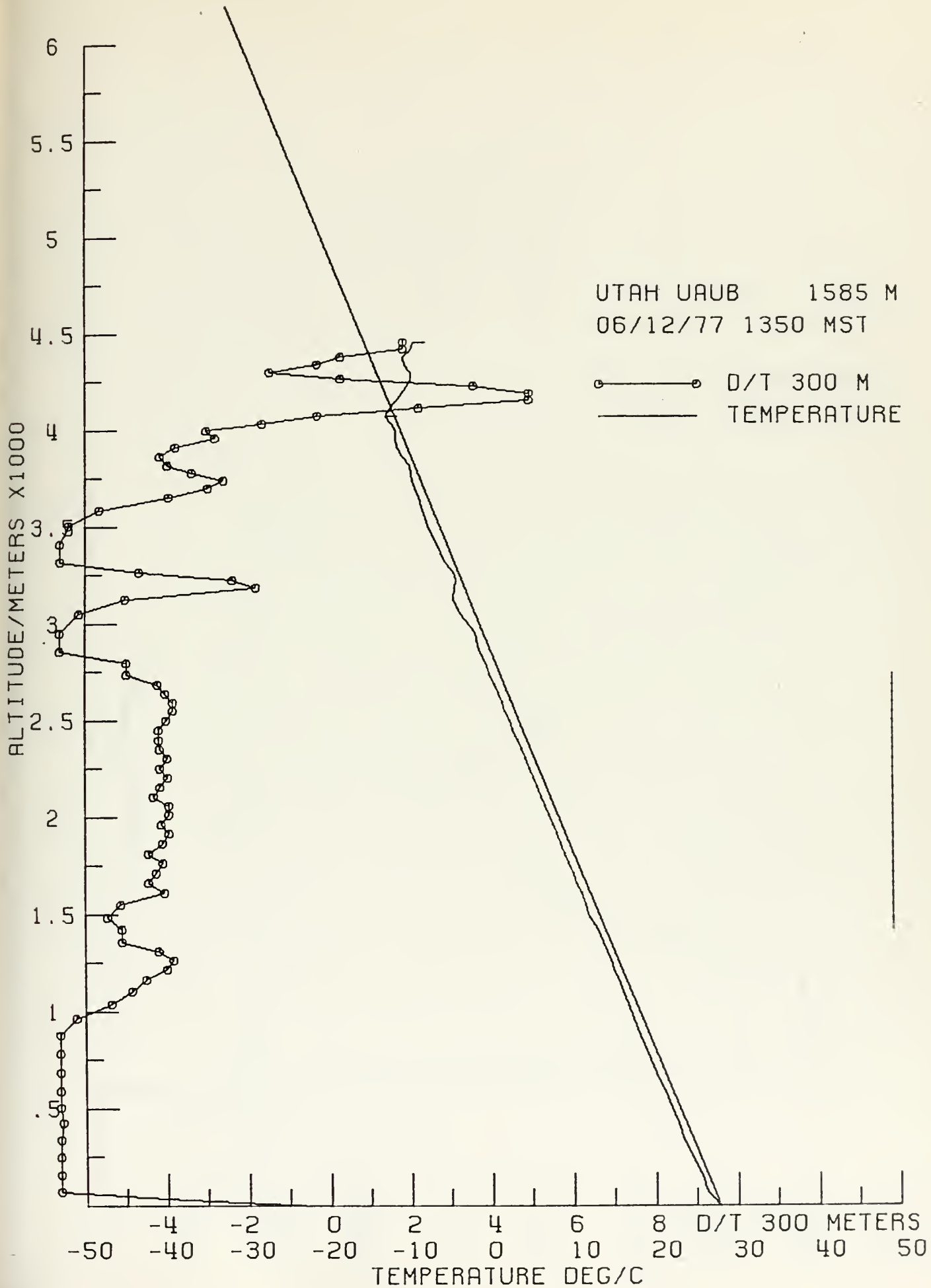
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/12/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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2
1.5
1
.5
-4
-2
0
2
4
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D/T 300 METERS
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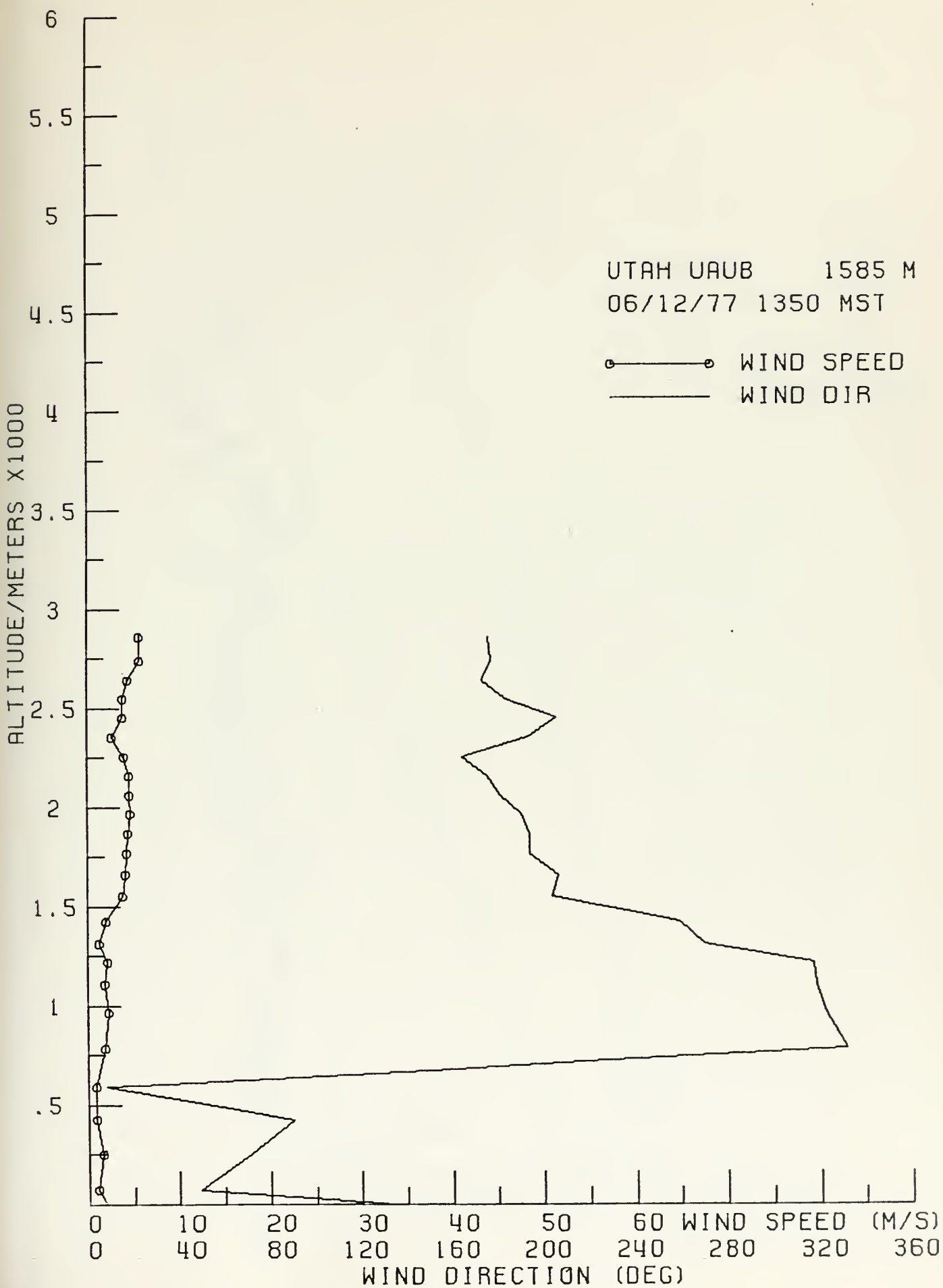
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/12/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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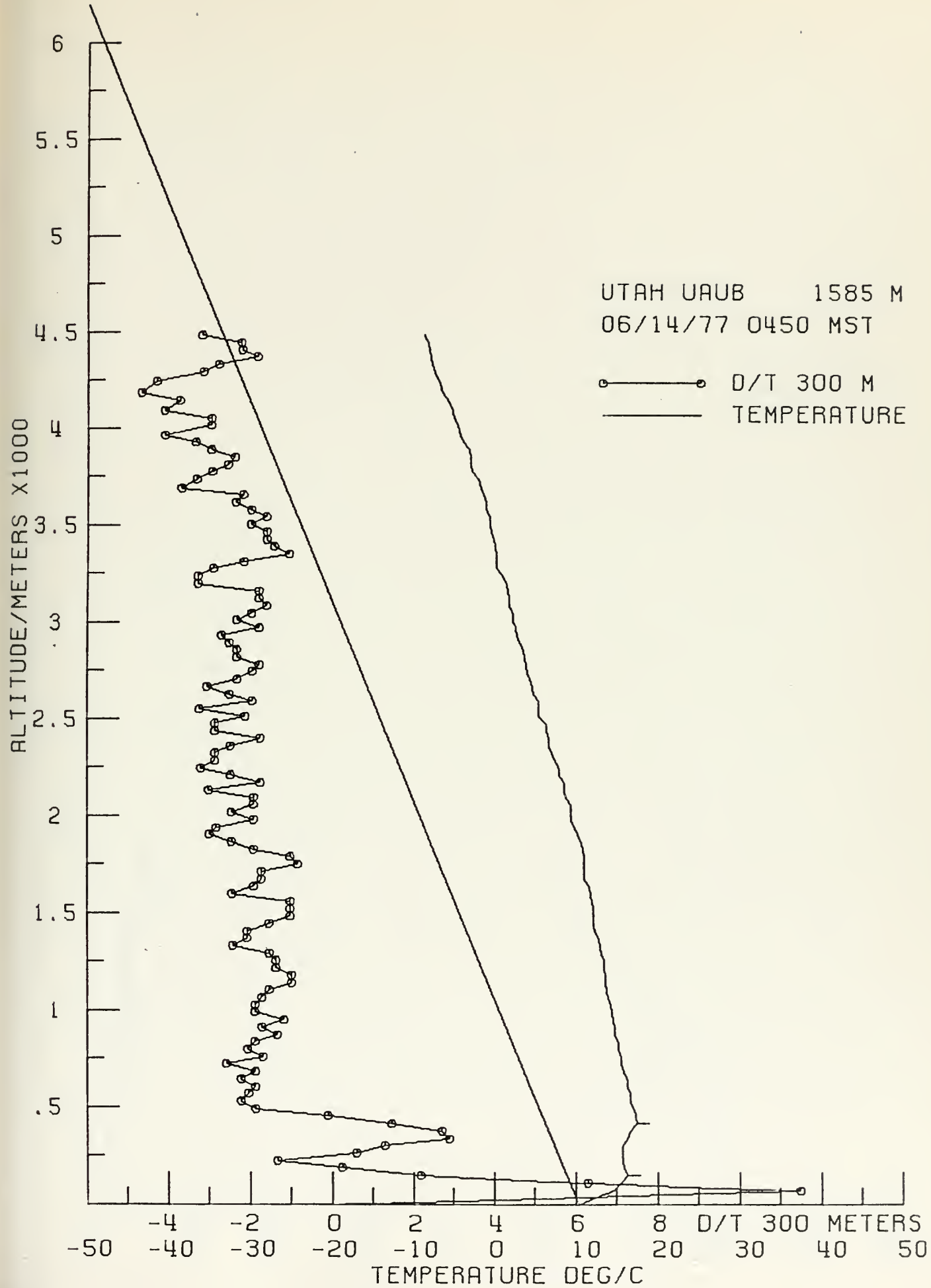
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/14/77 0450 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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2.5
2
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1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
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-40
-30
-20
-10
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10
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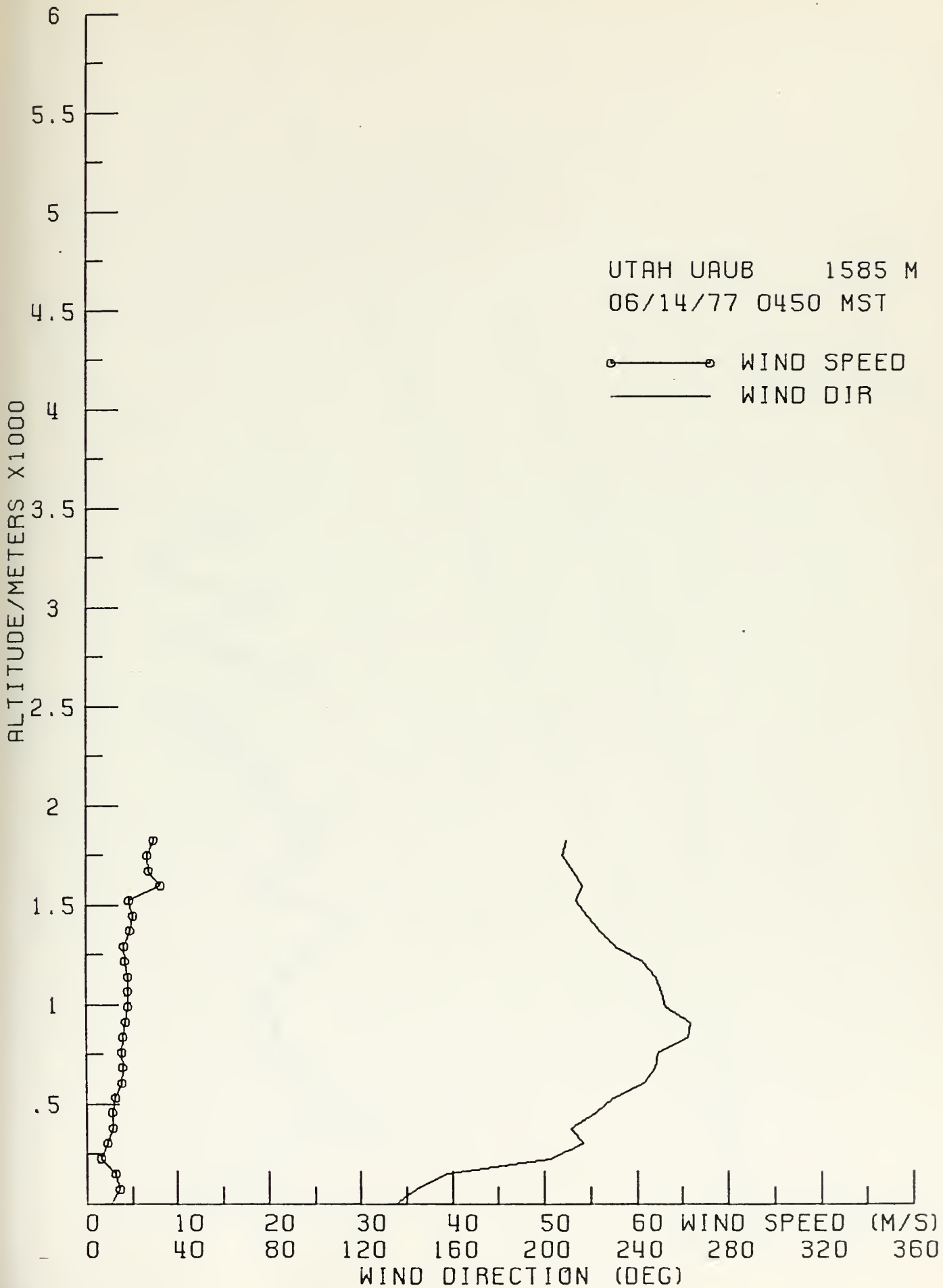
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/14/77 0450 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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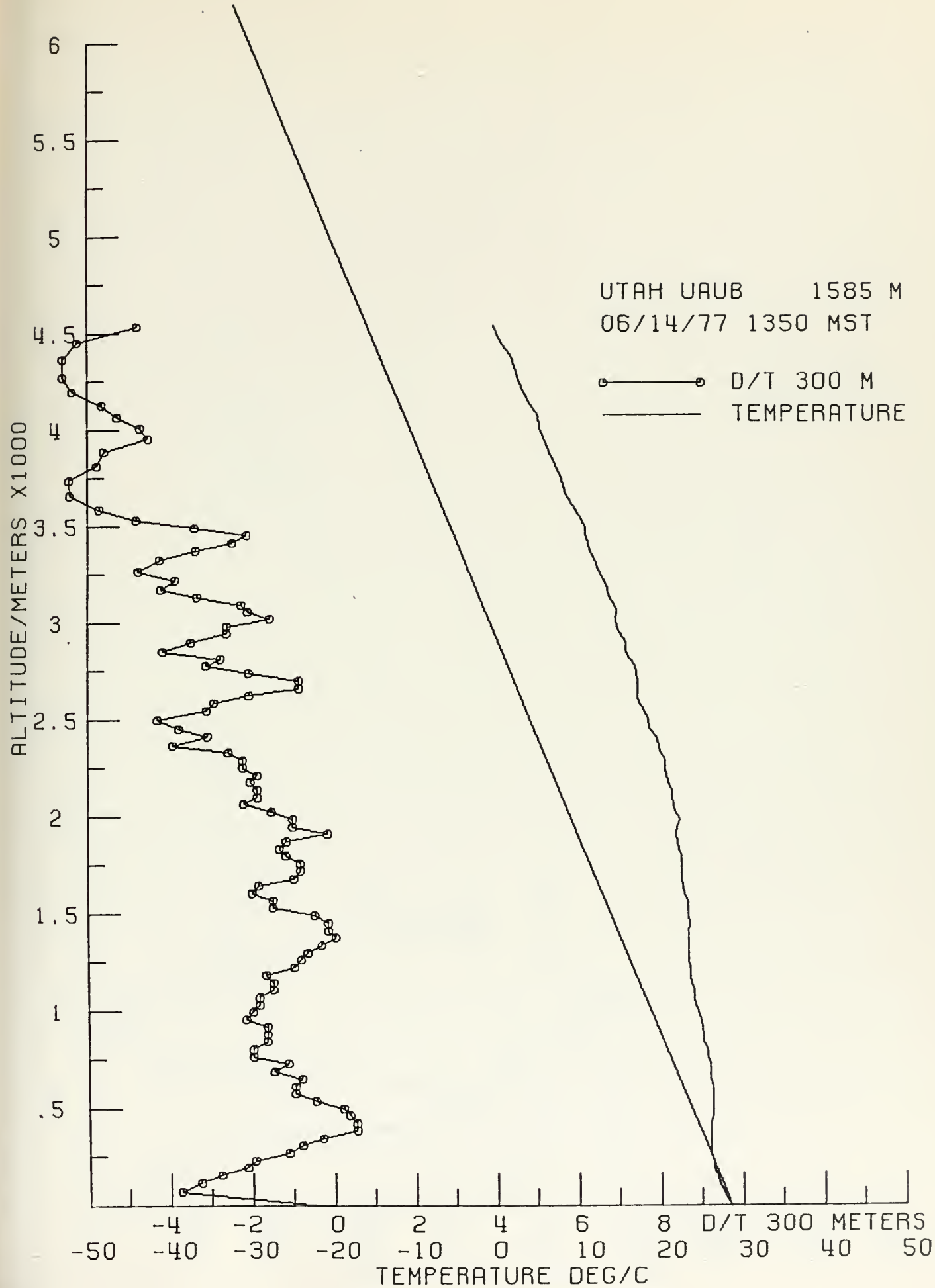
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/14/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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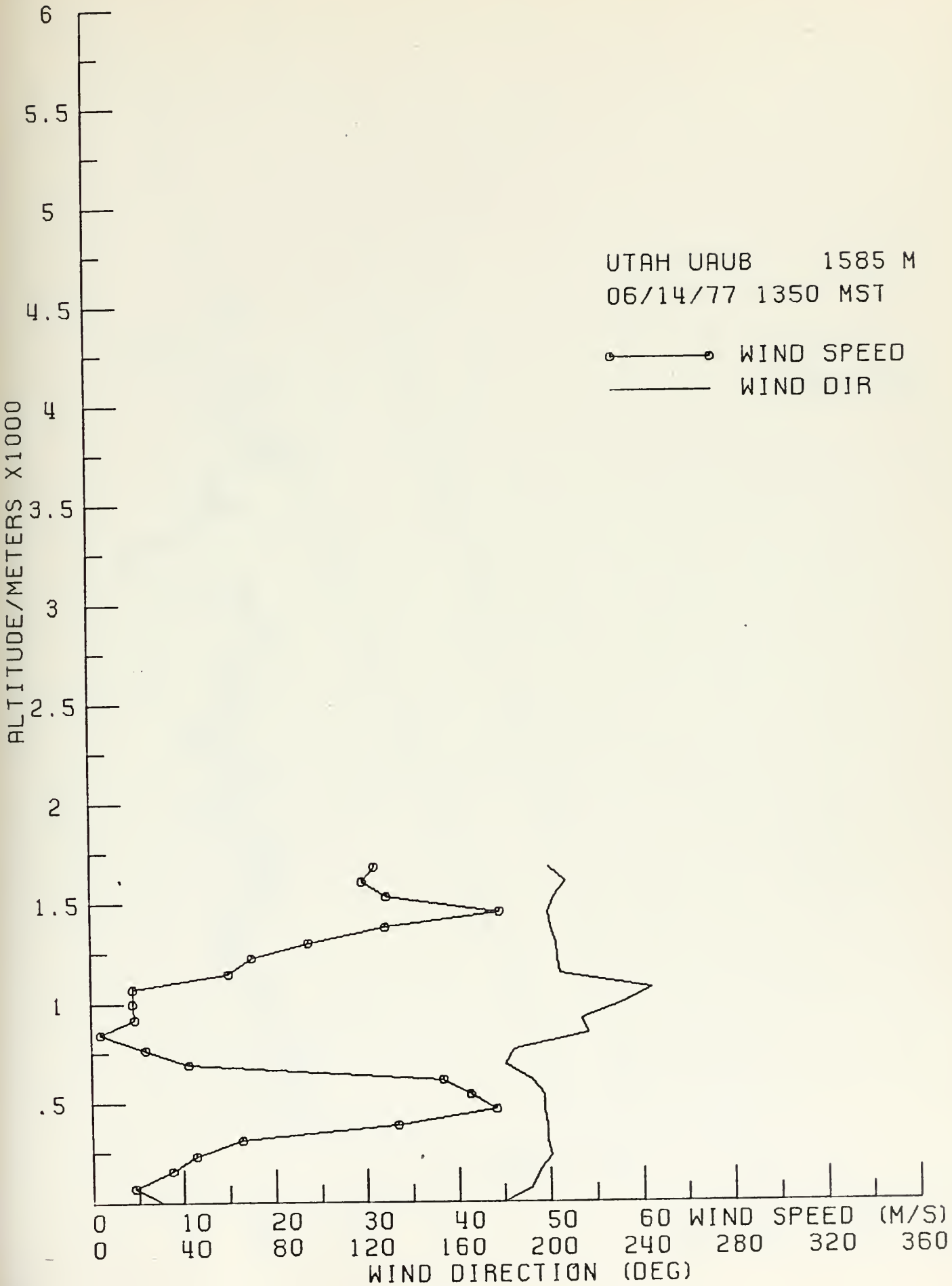
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/14/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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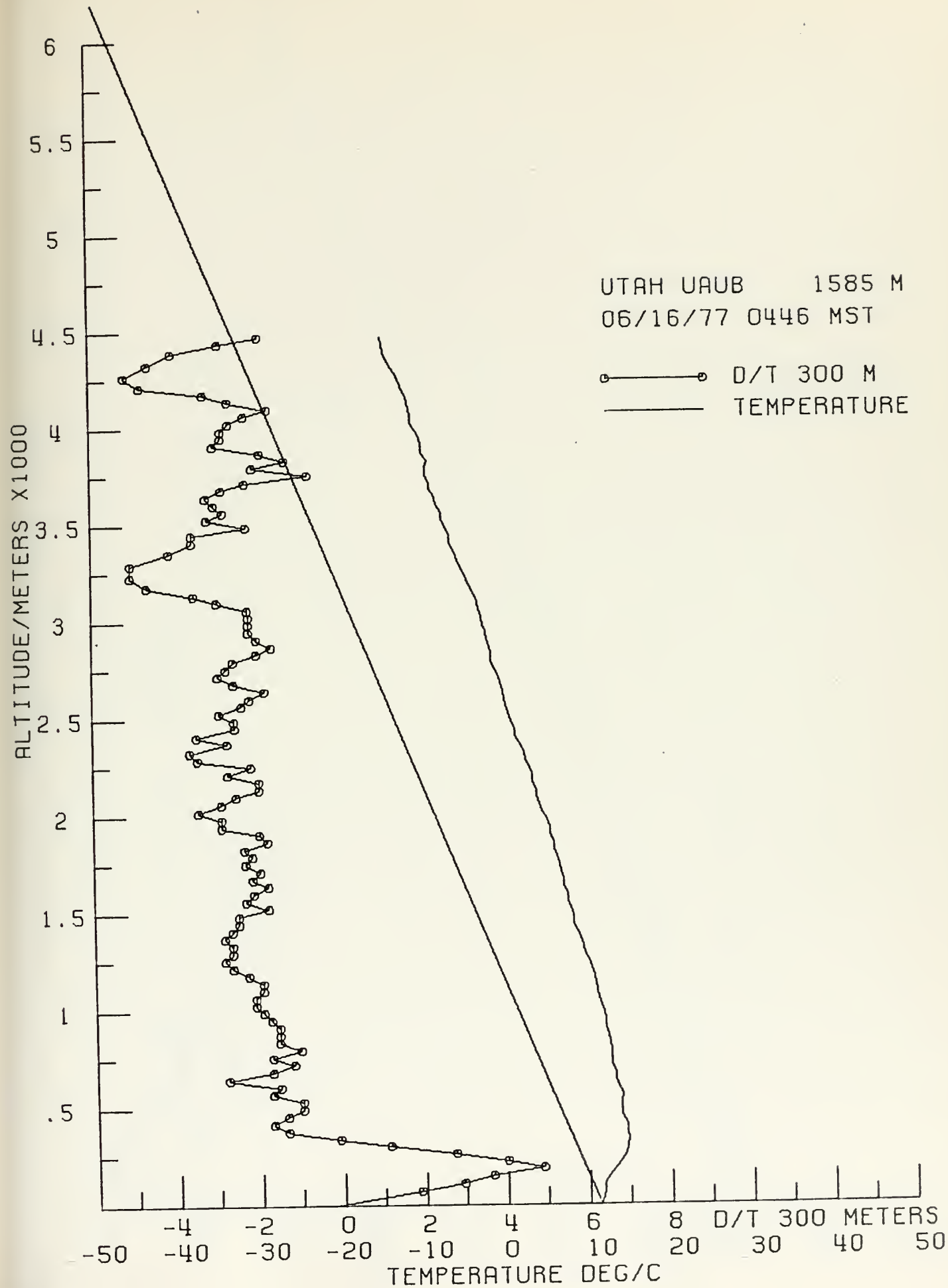
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/16/77 0446 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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-4 -2 0 2 4 6 8 D/T 300 METERS
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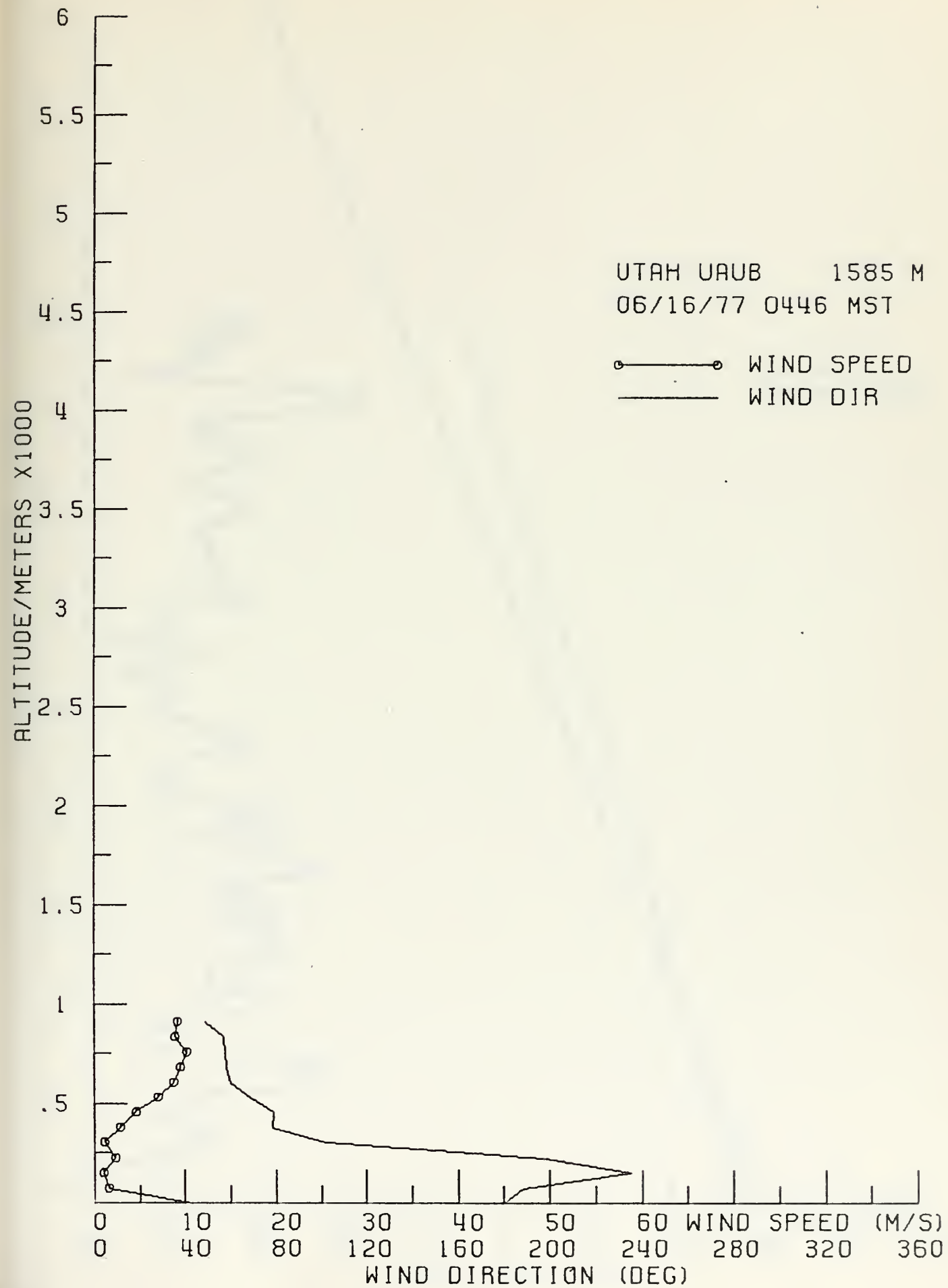
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/16/77 0446 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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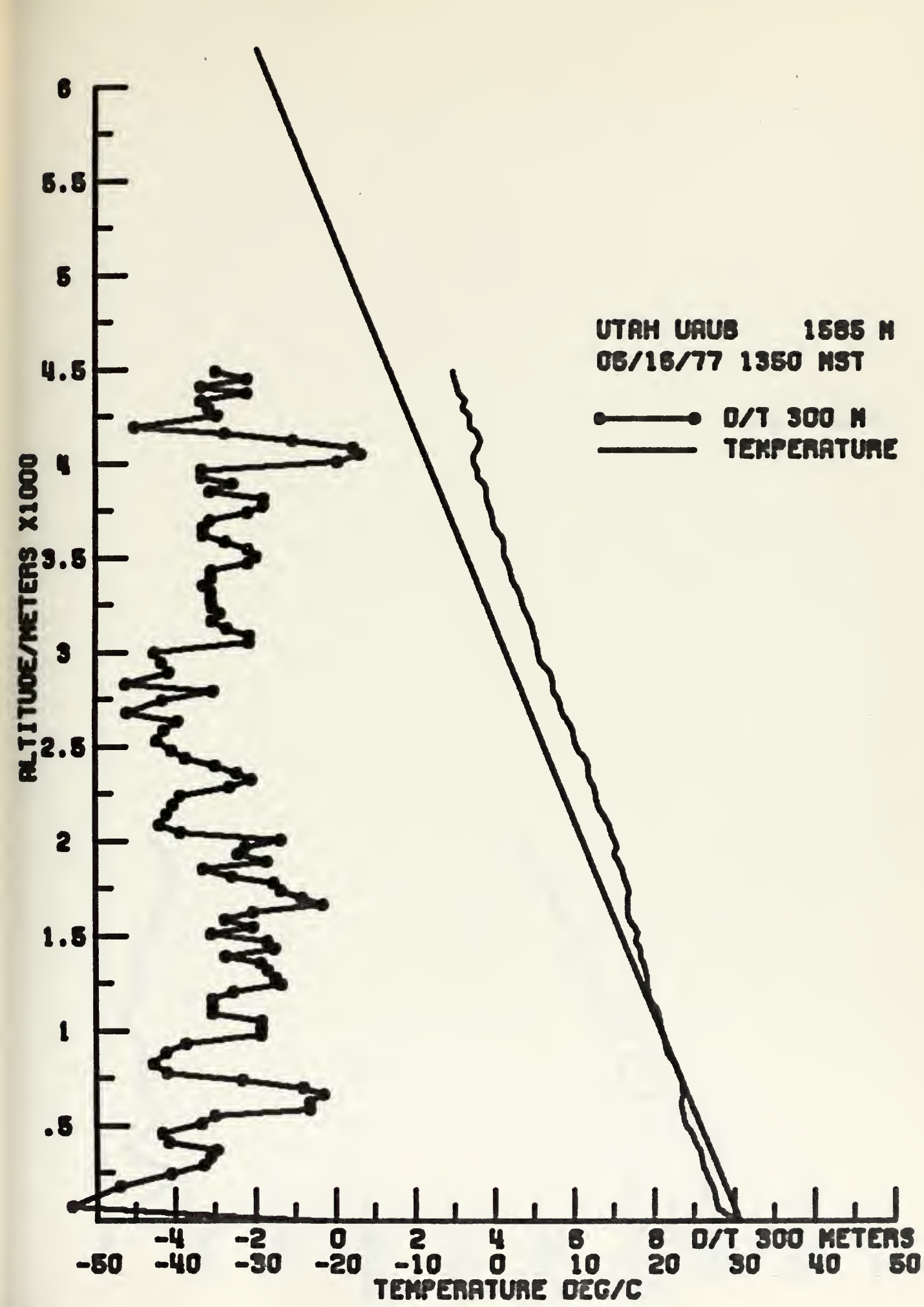
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH URUB 1585 M
05/16/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5
4.5
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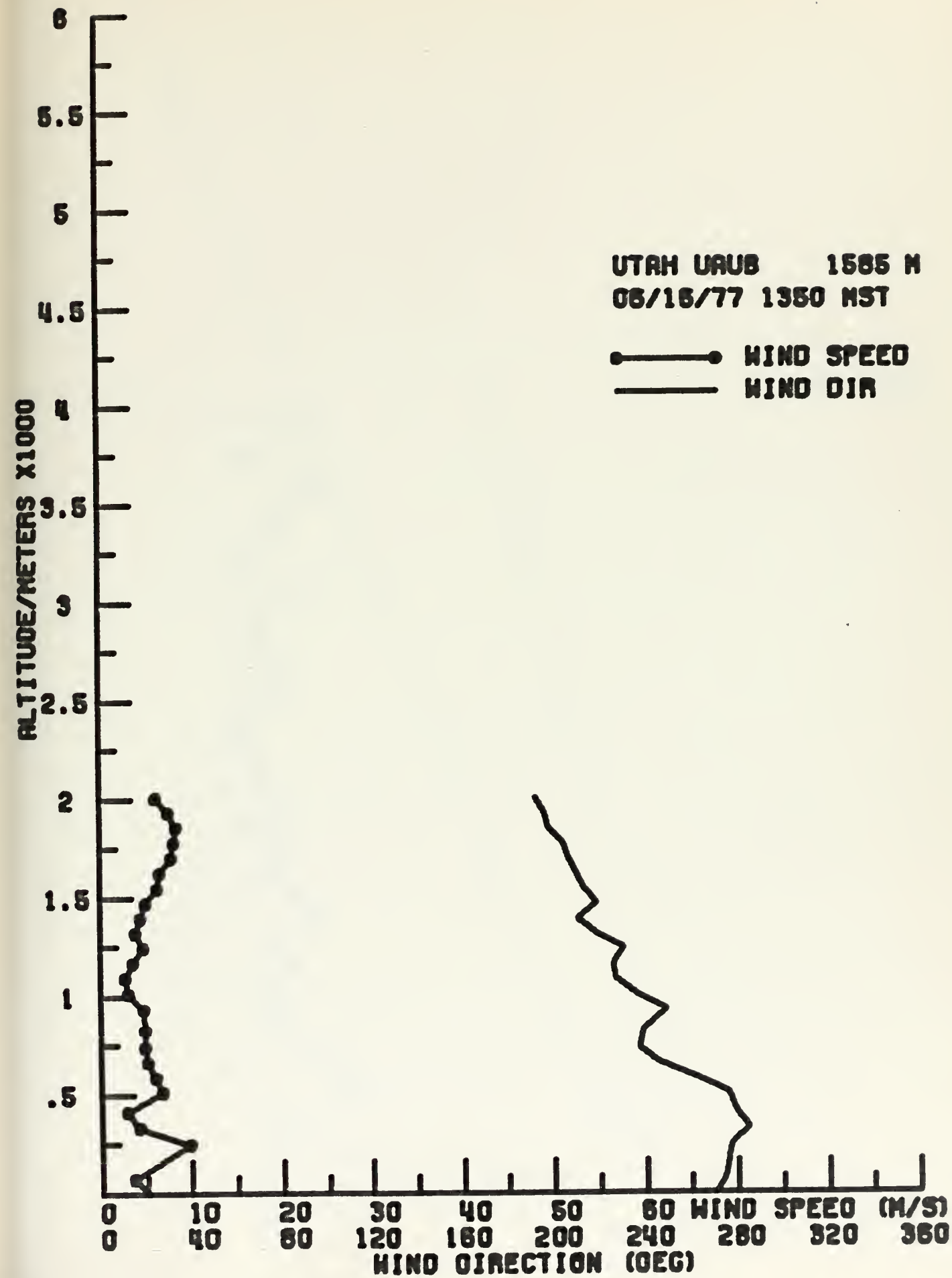
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/16/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
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0 10 20 30 40 50 60 WIND SPEED (M/S)
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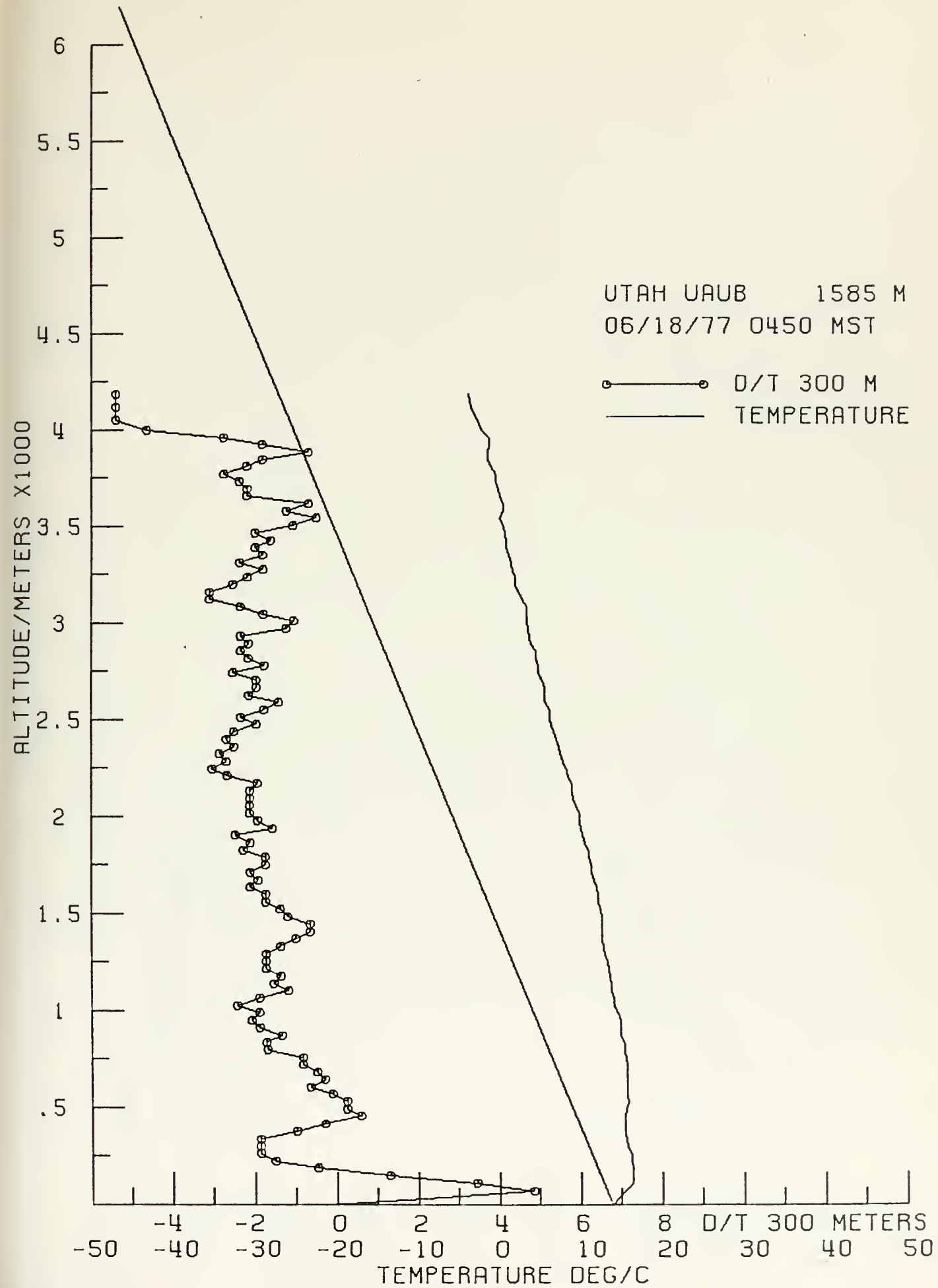
WIND DIRECTION (DEG)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06/18/77 0450 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
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1
.5
-4
-2
0
2
4
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8
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10
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30
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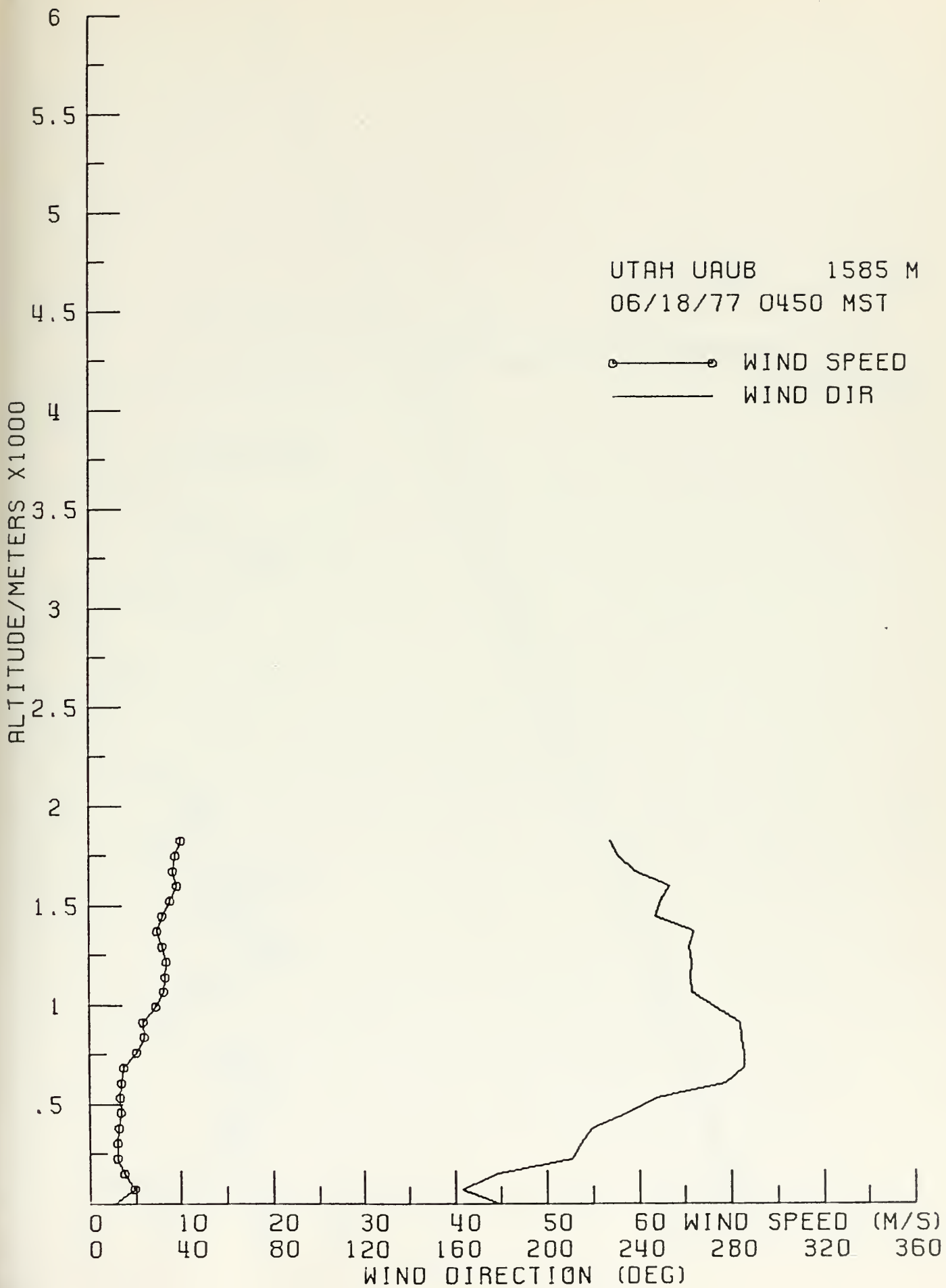
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/18/77 0450 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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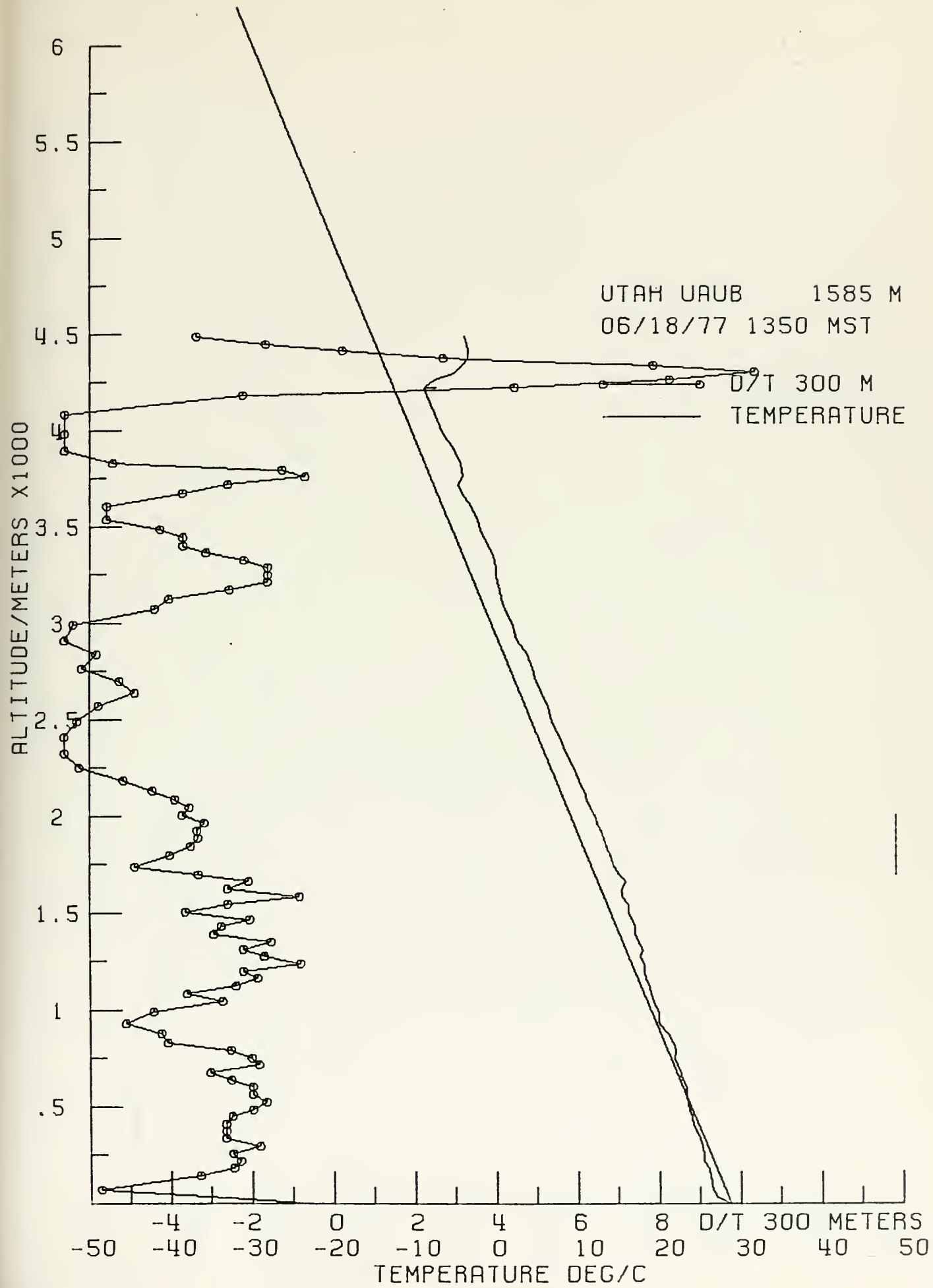
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/18/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
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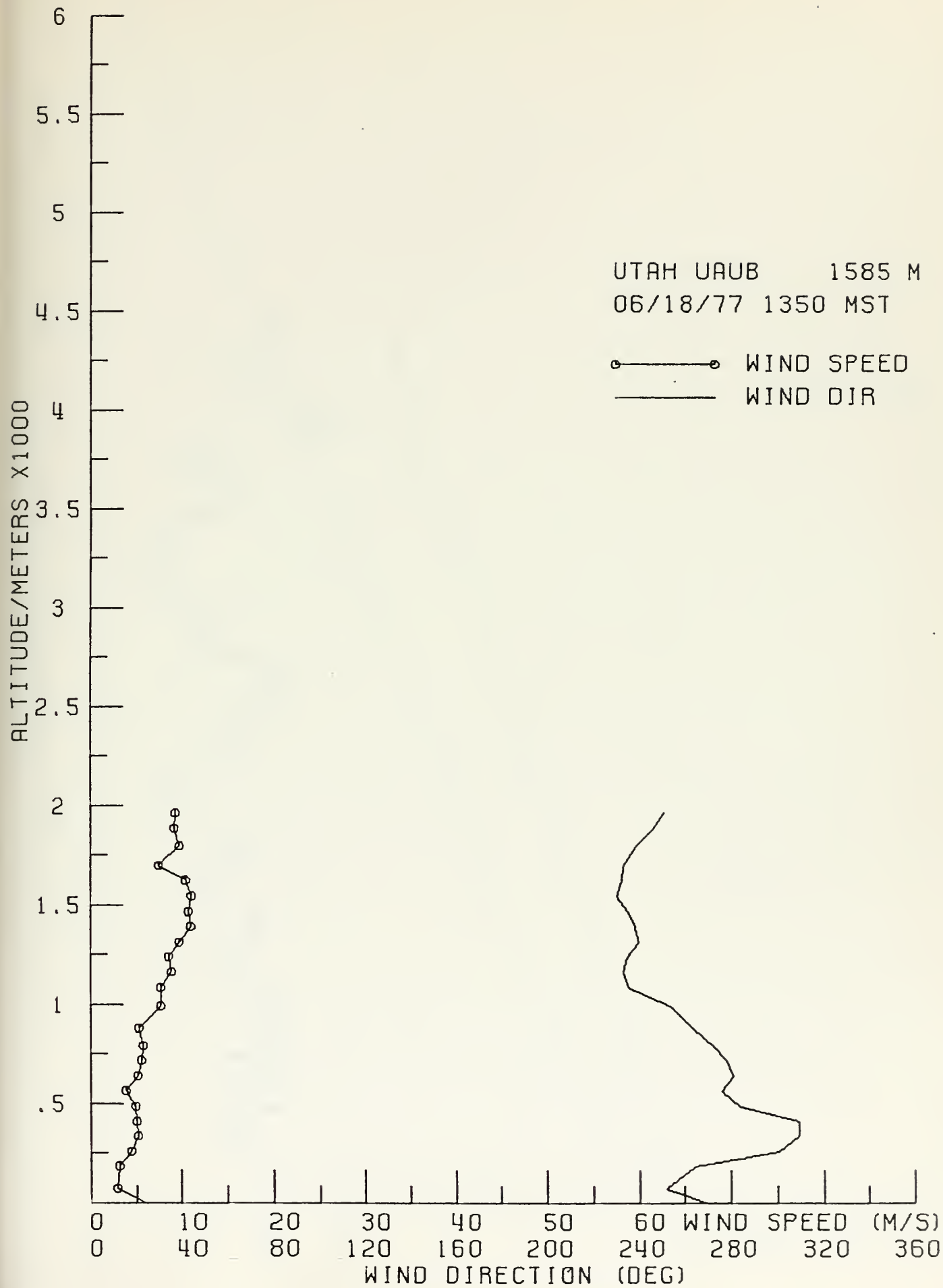
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/18/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
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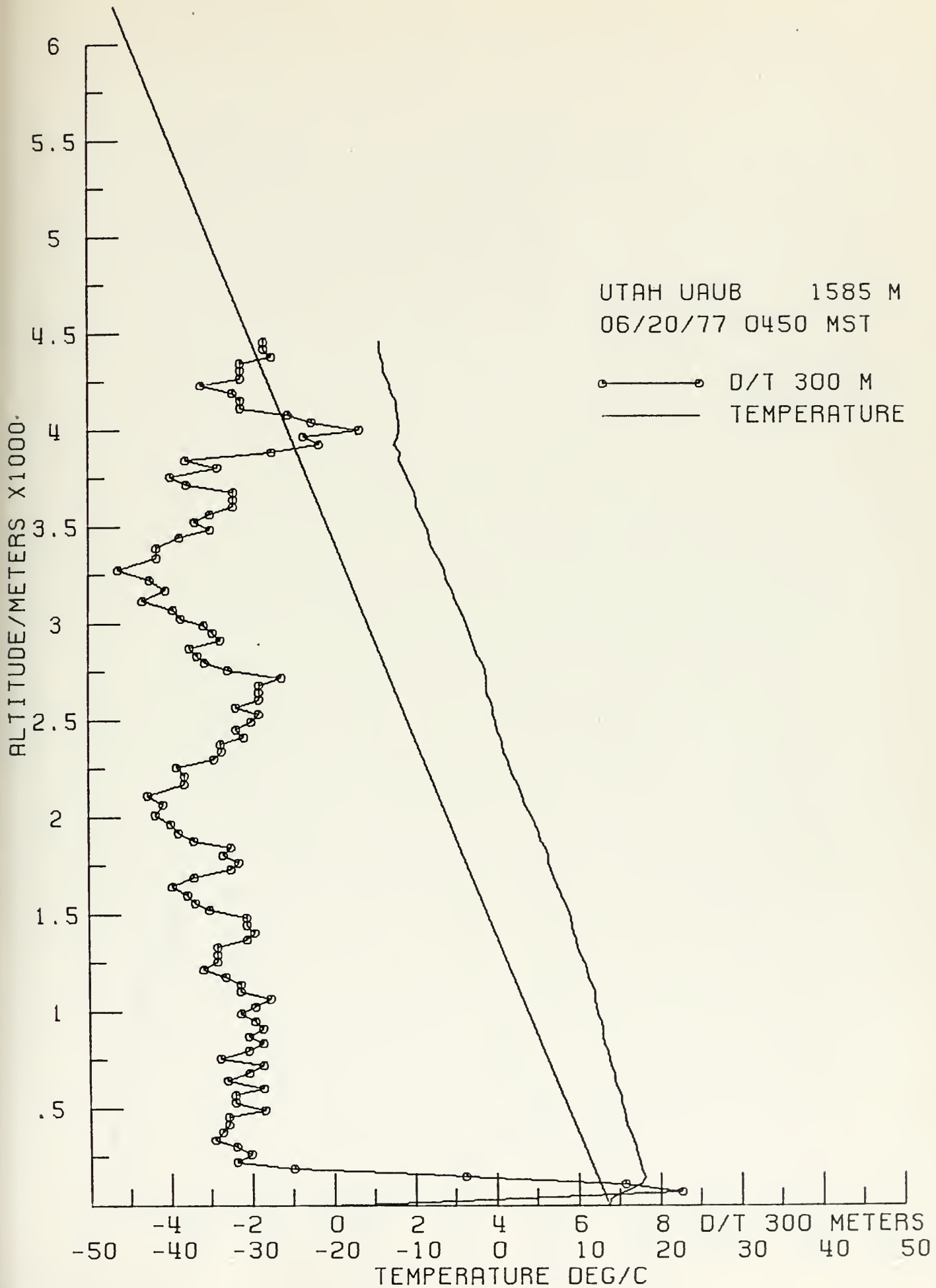
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/20/77 0450 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
4
3.5
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2.5
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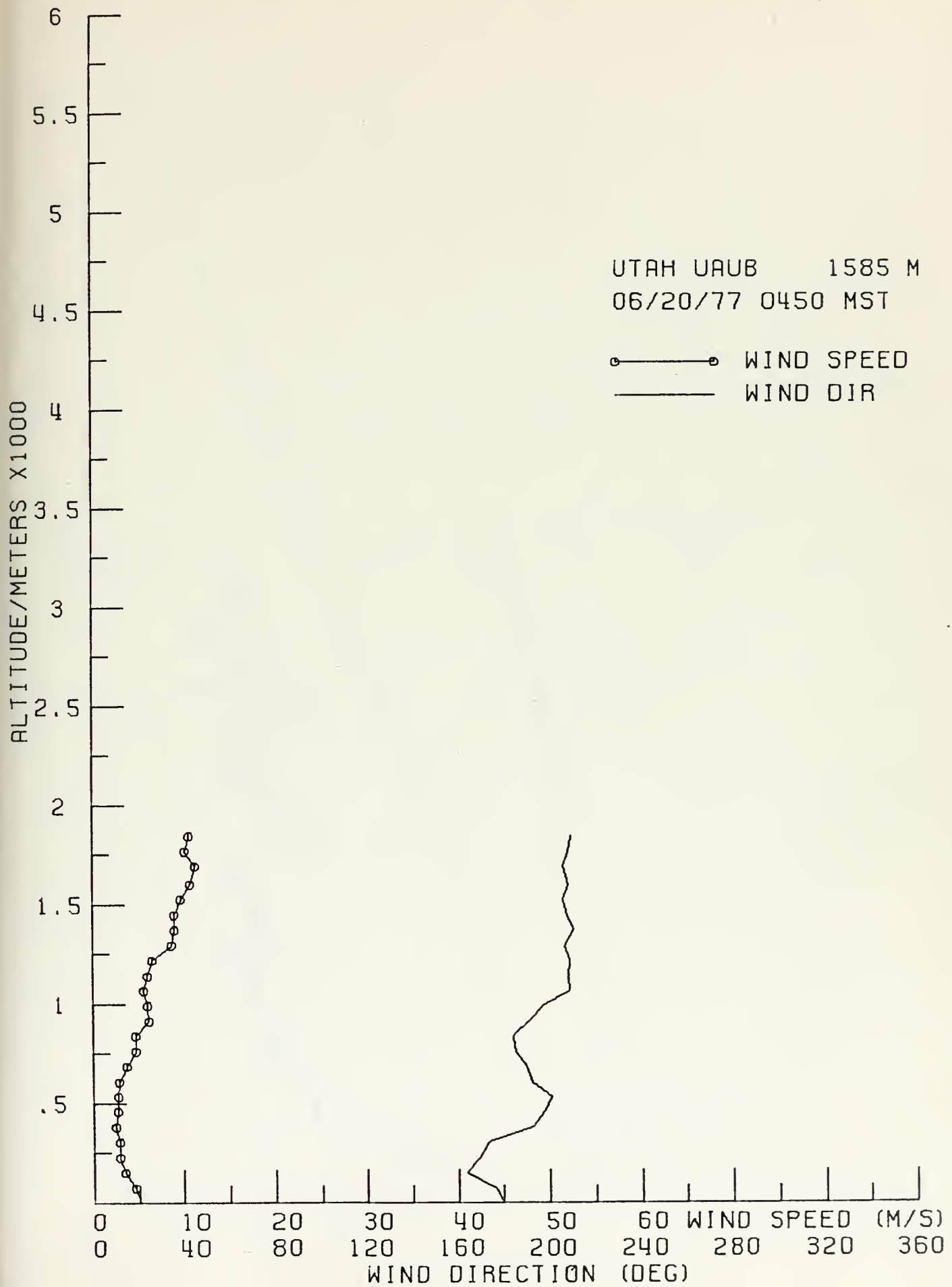
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/20/77 0450 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
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3.5
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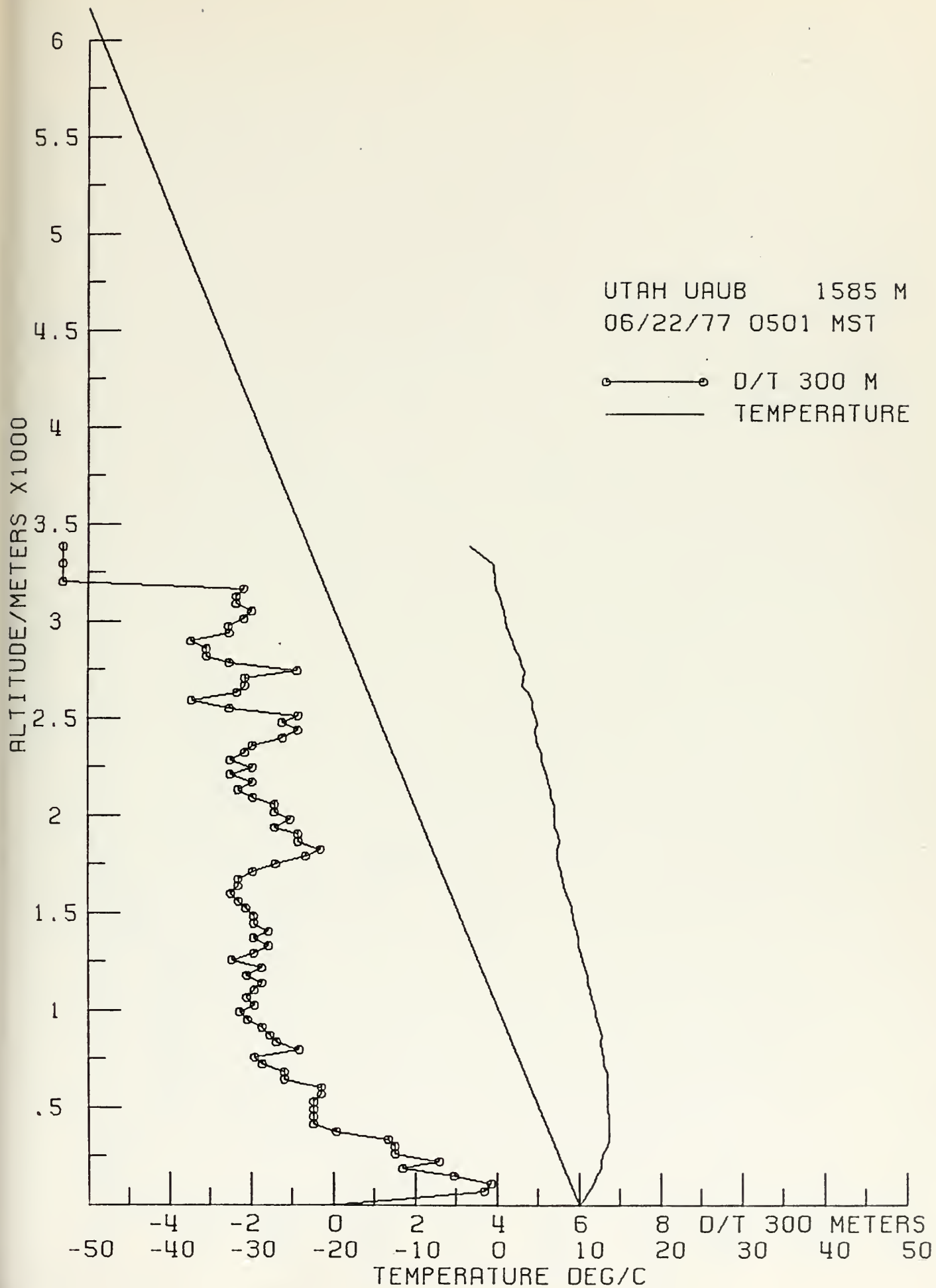
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/22/77 0501 MST
D/T 300 M
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ALTITUDE/METERS X1000
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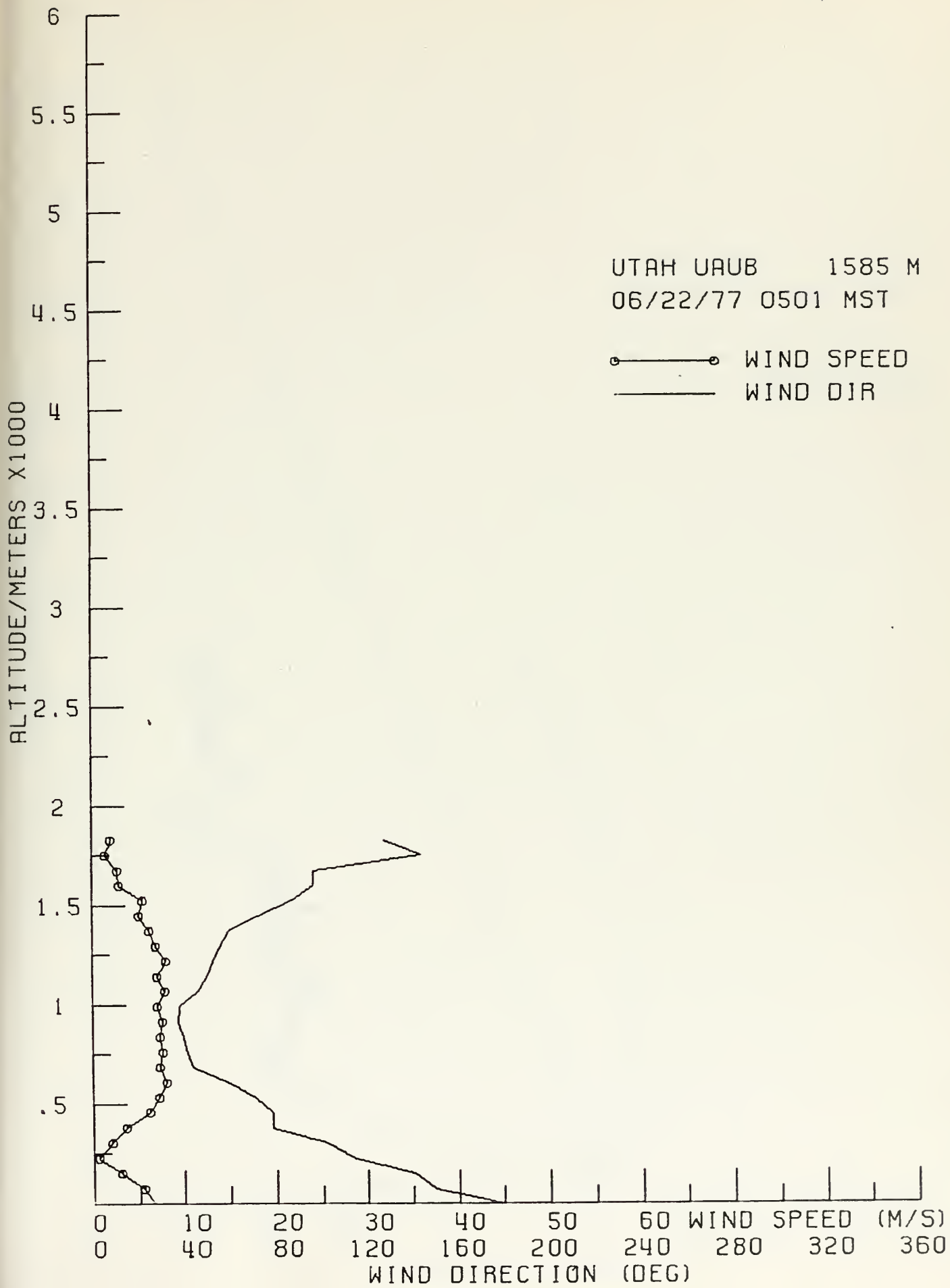
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/22/77 0501 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
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3.5
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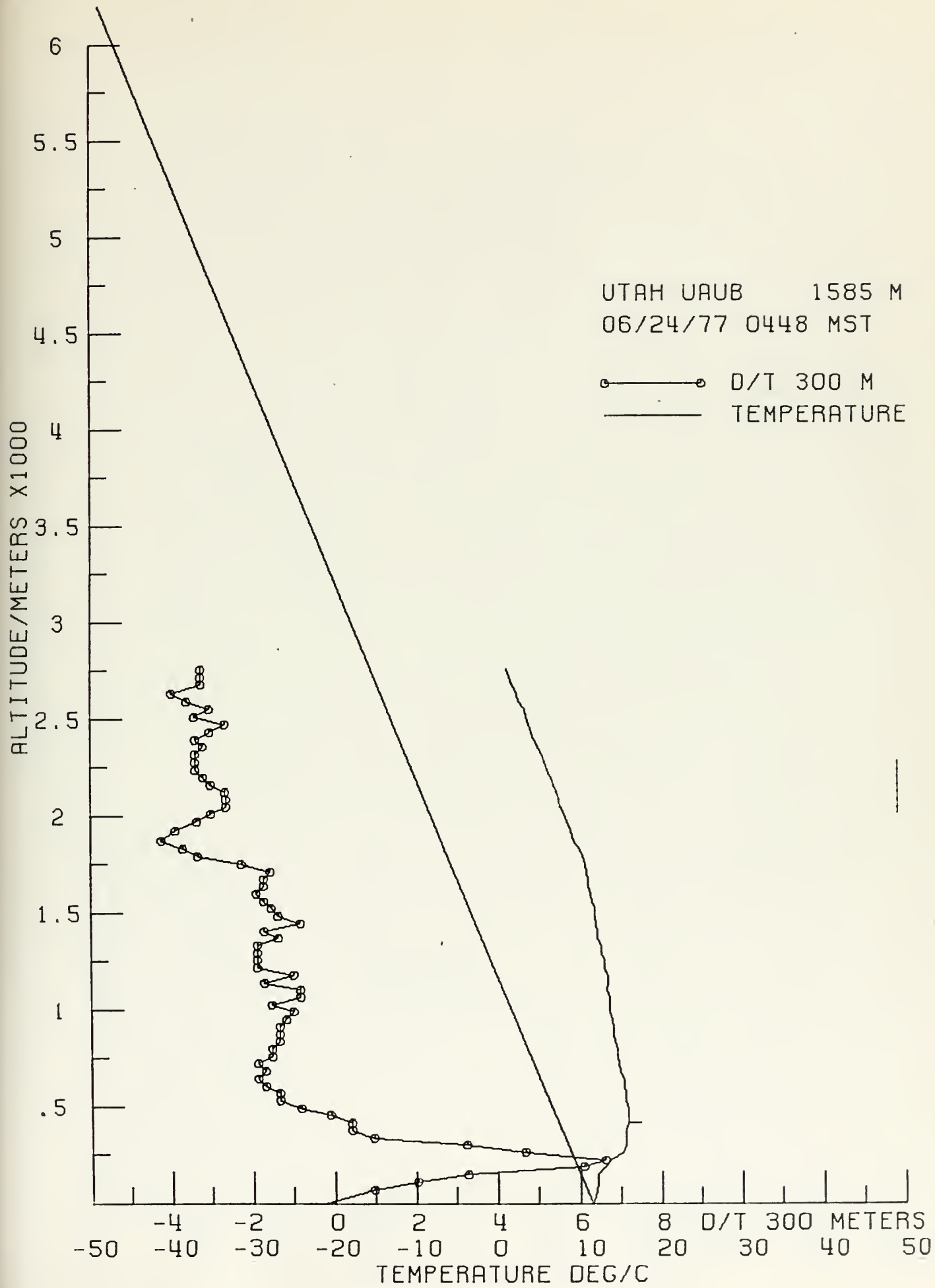
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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06/24/77 0448 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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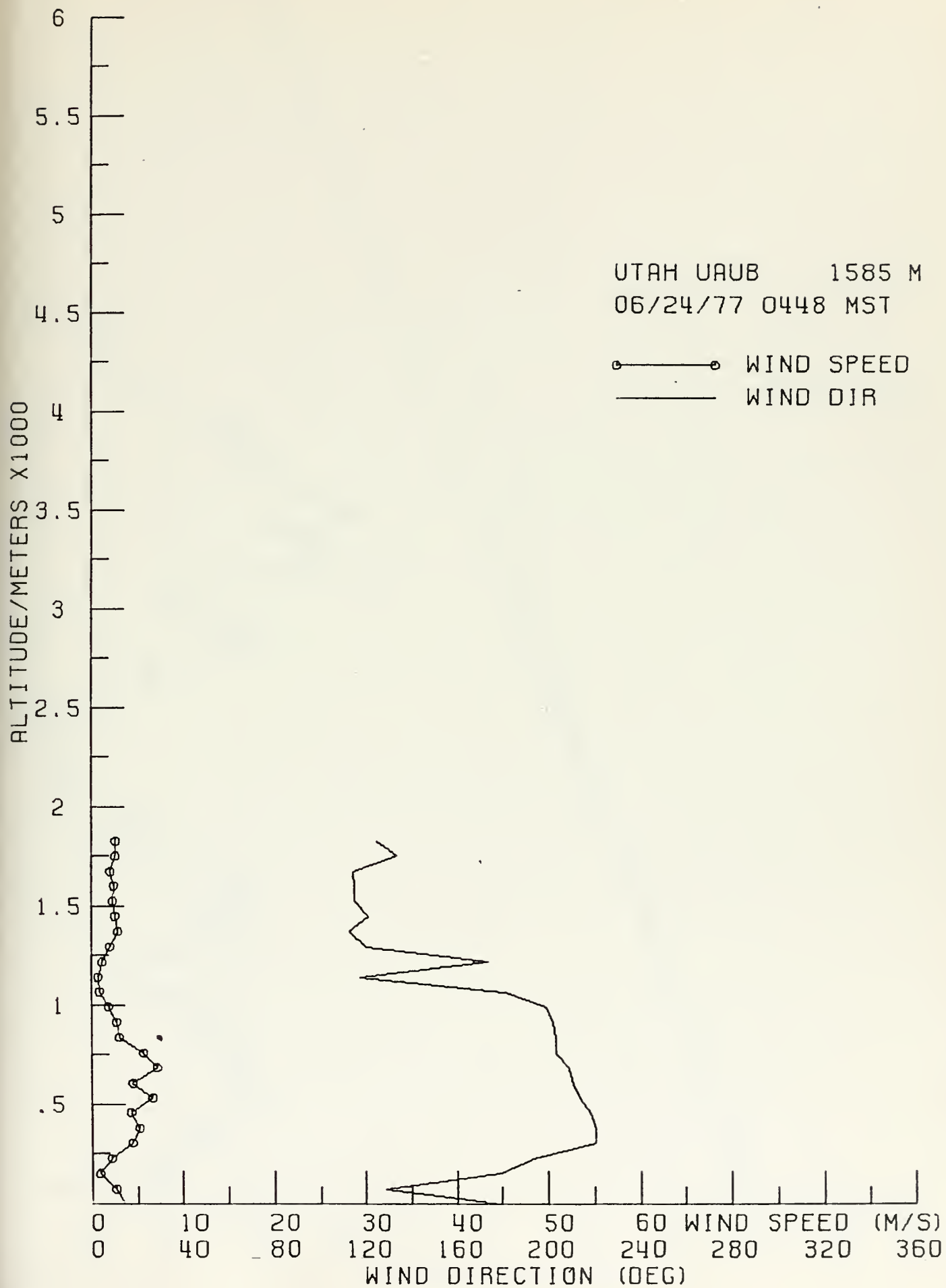
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/24/77 0448 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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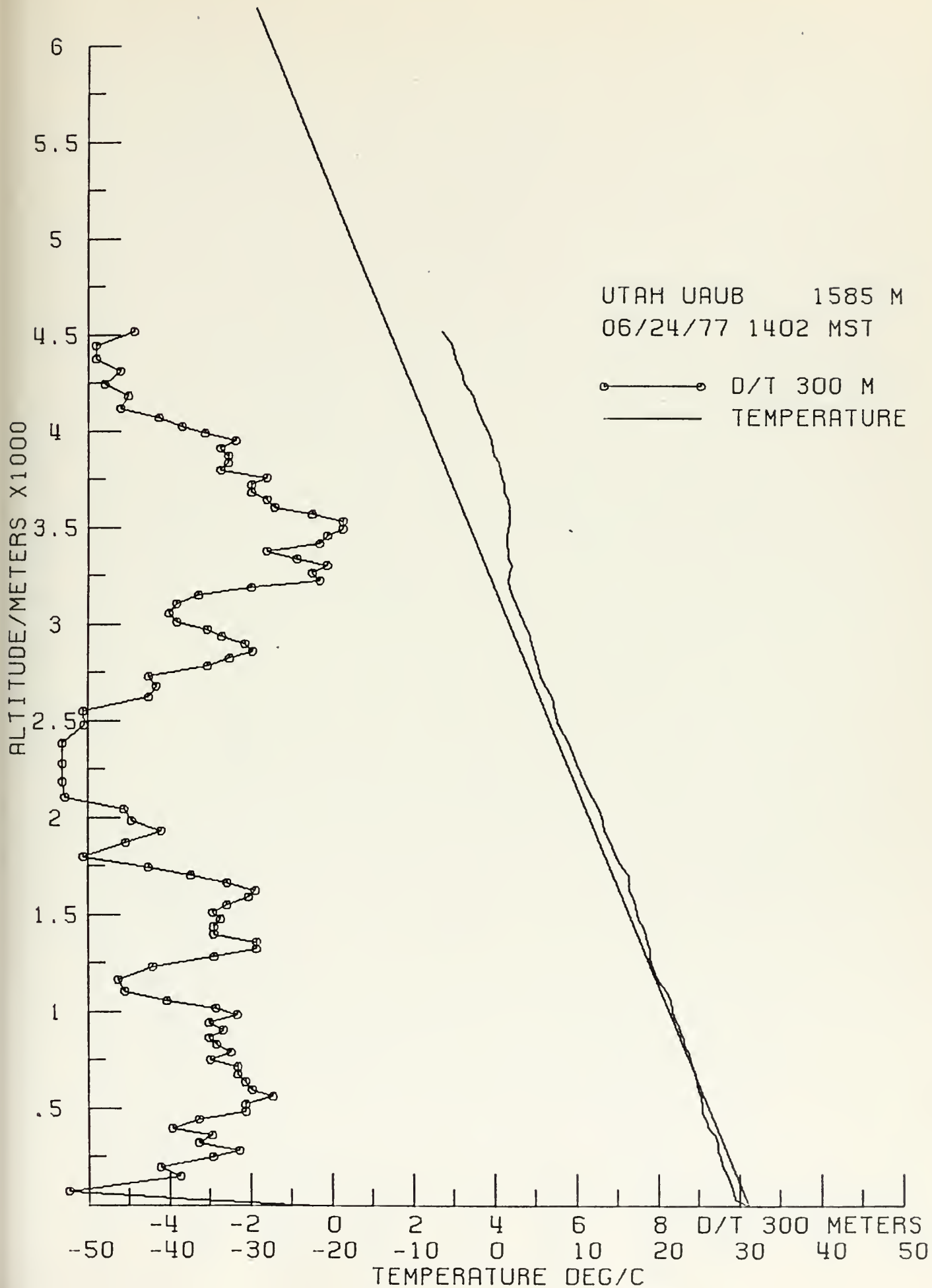
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/24/77 1402 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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3.5
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2.5
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-4 -2 0 2 4 6 8 D/T 300 METERS
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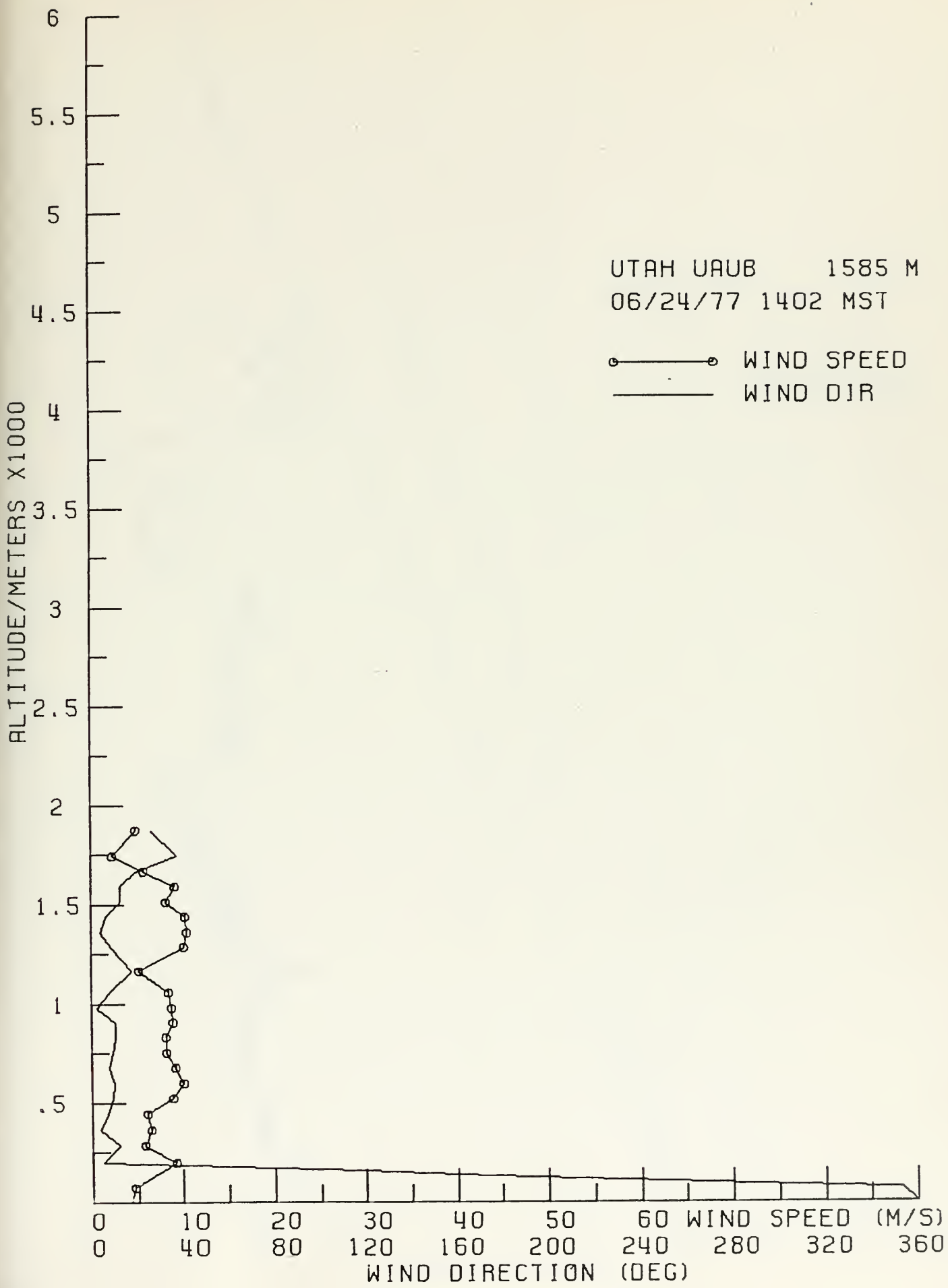
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/24/77 1402 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
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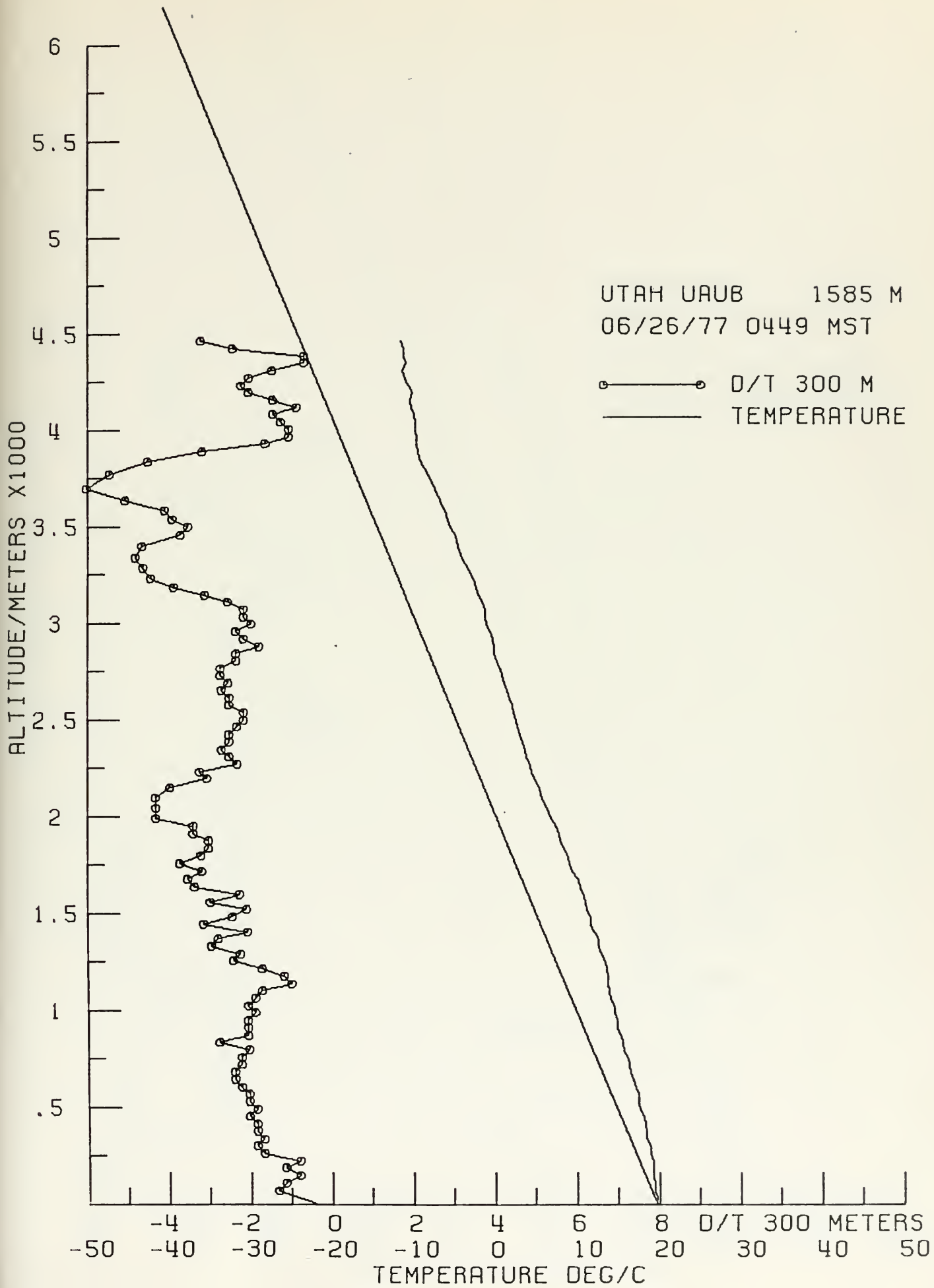
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/26/77 0449 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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1.5
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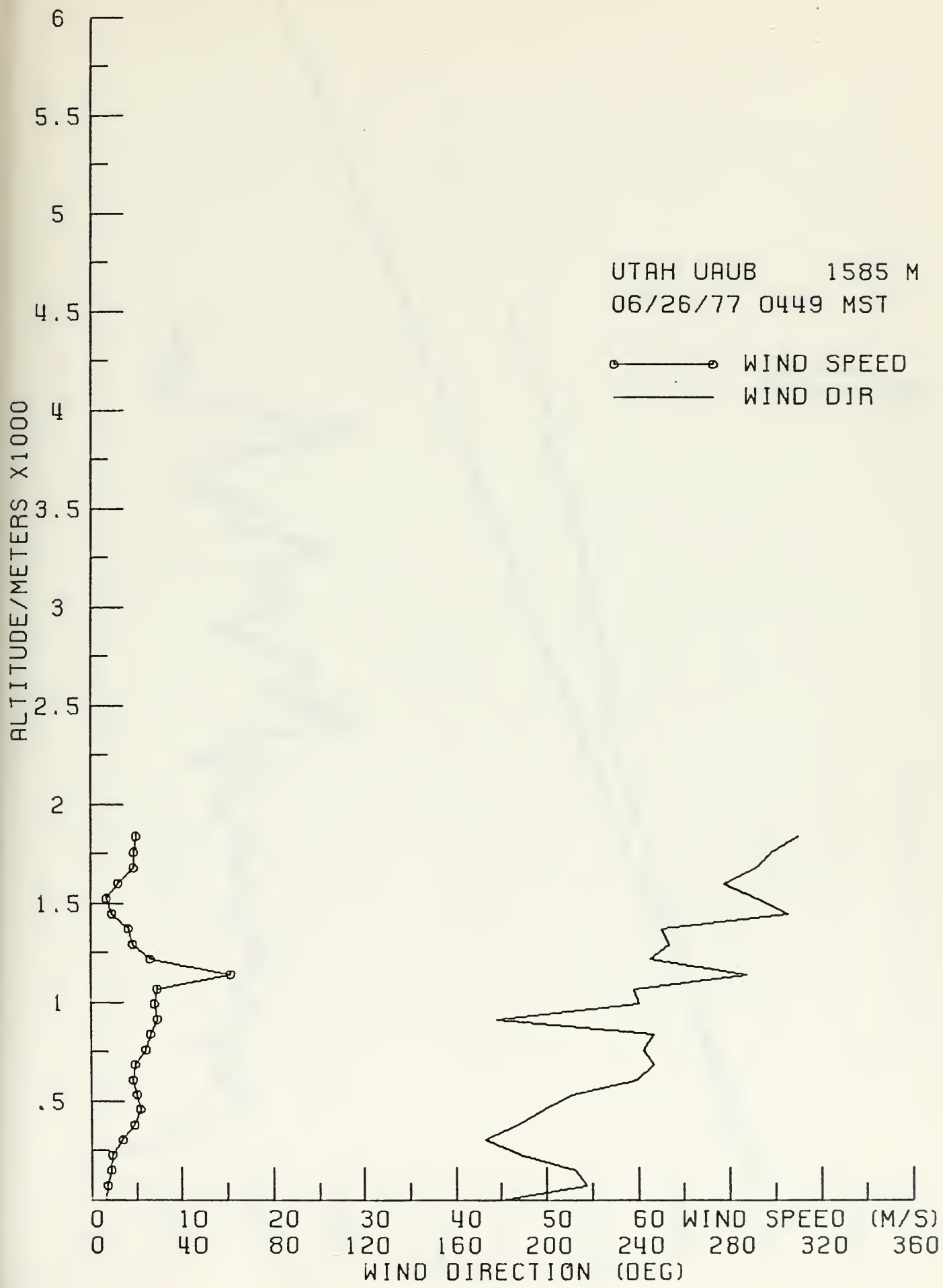
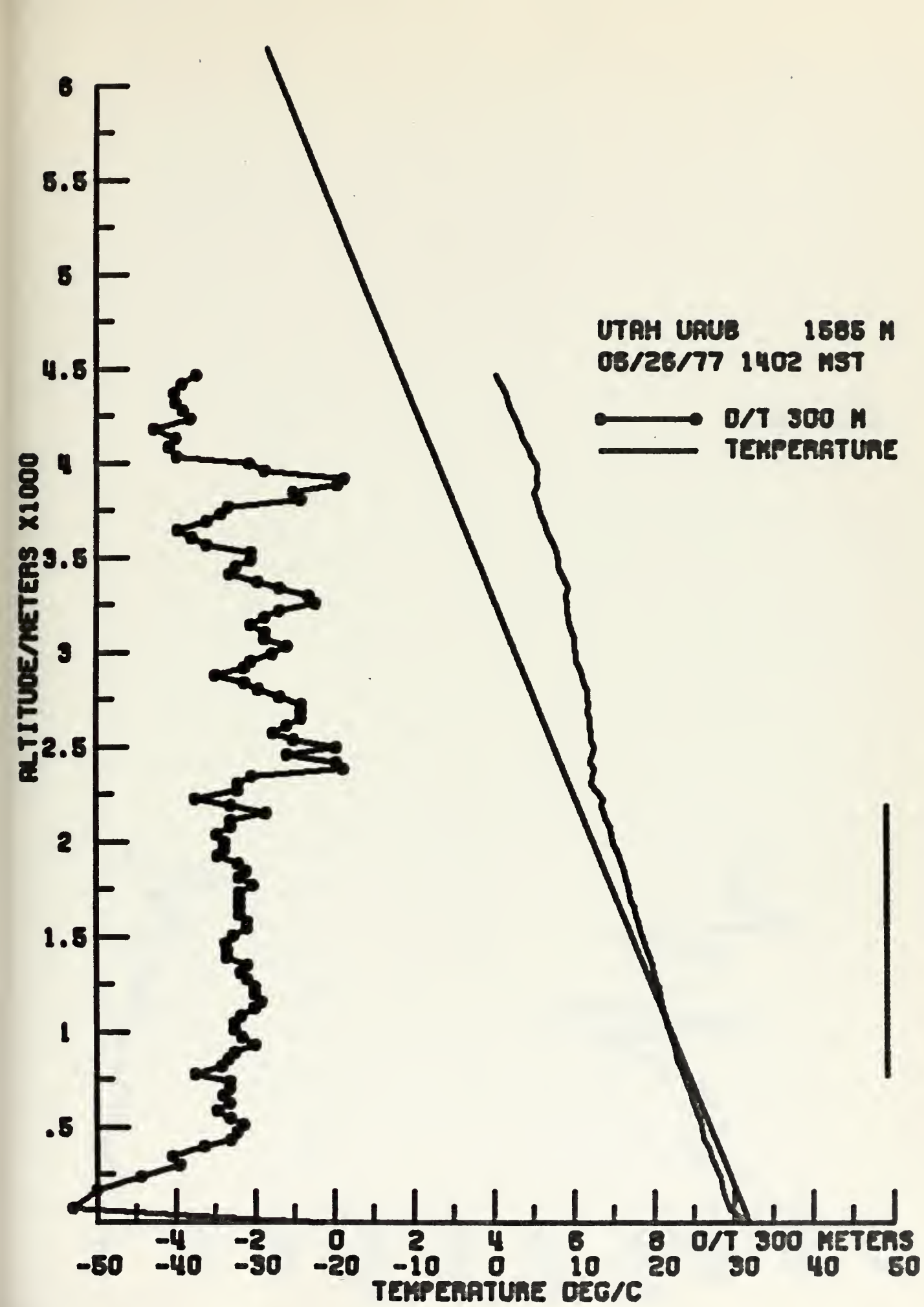
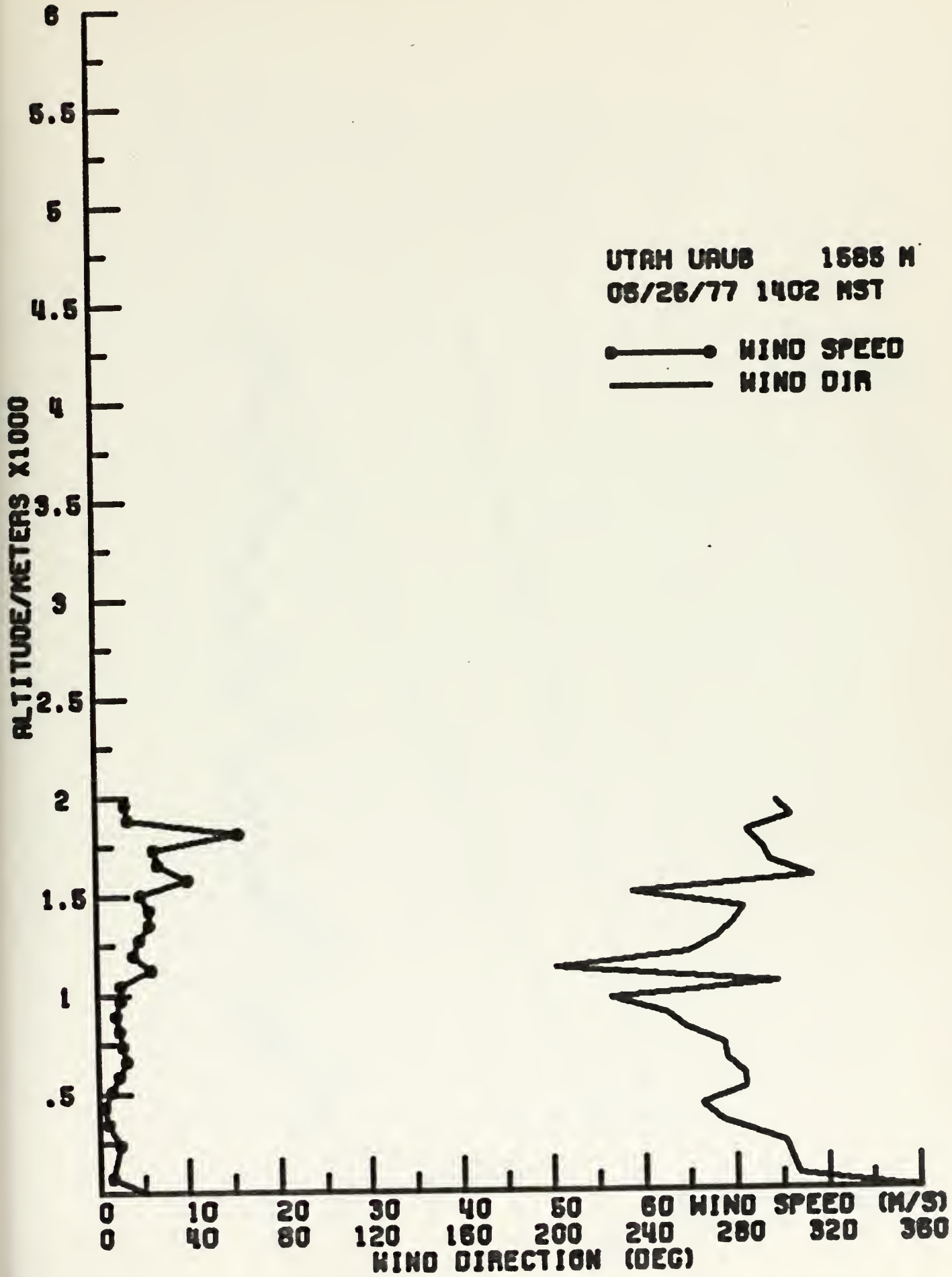
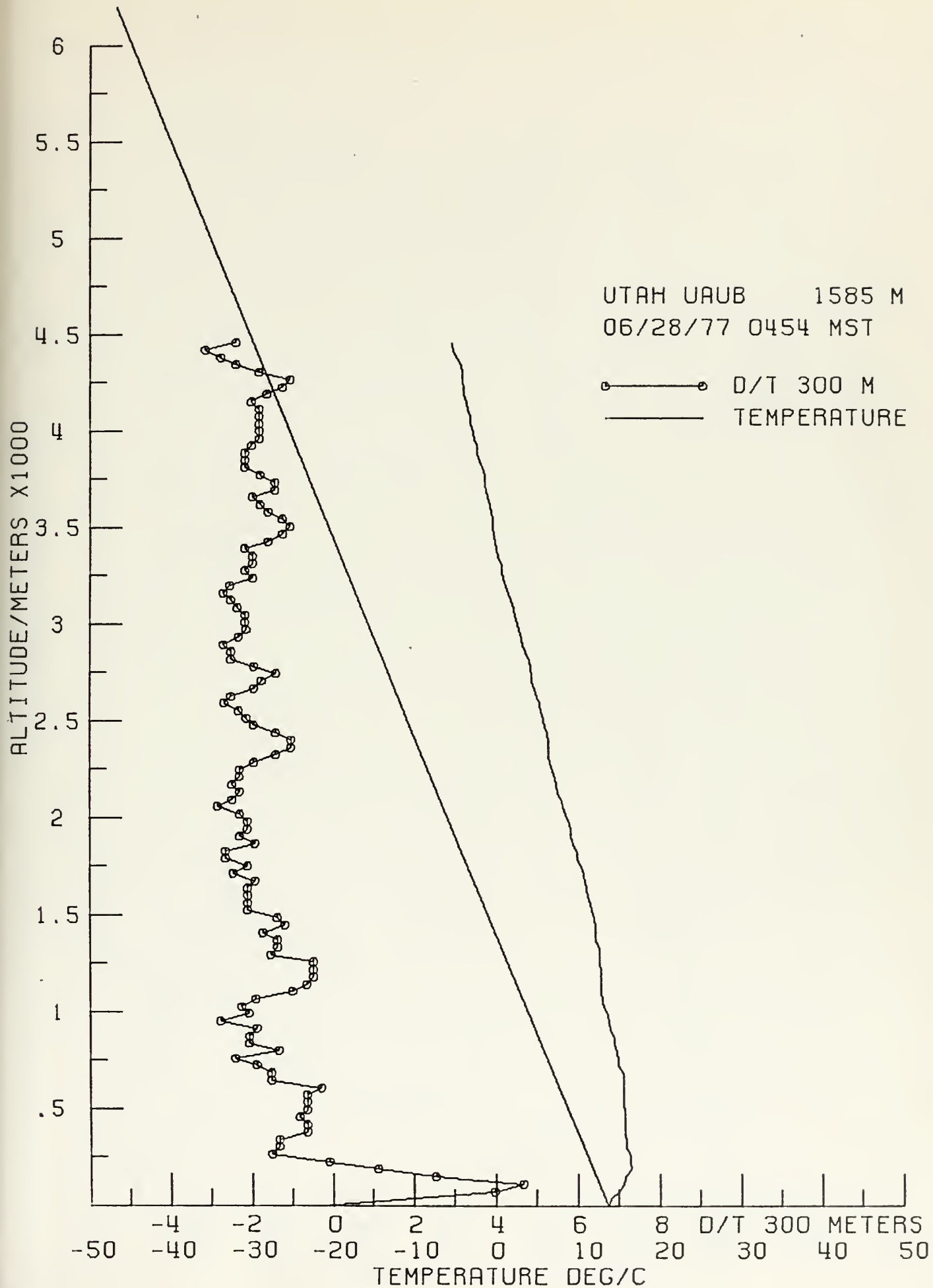
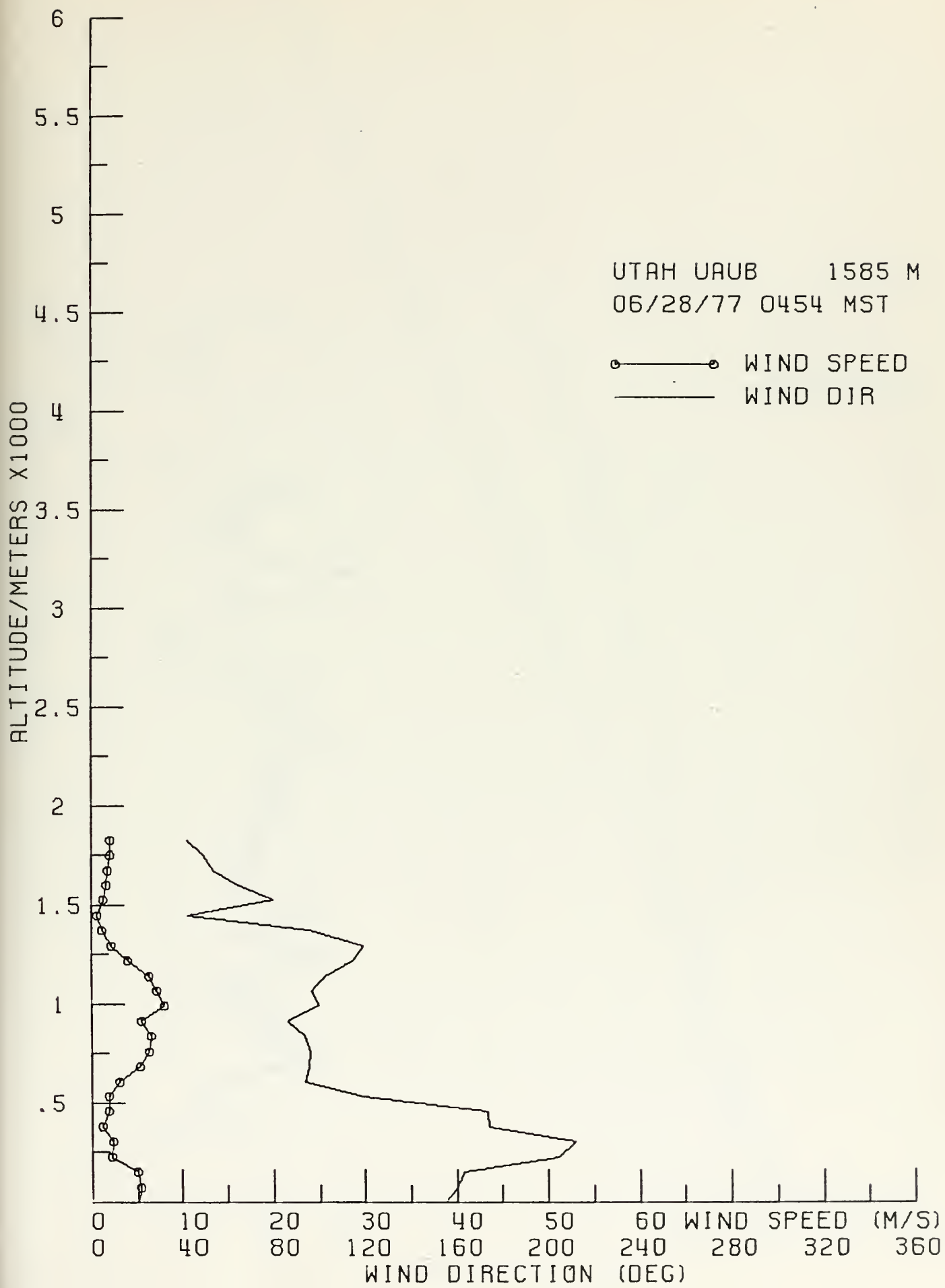
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

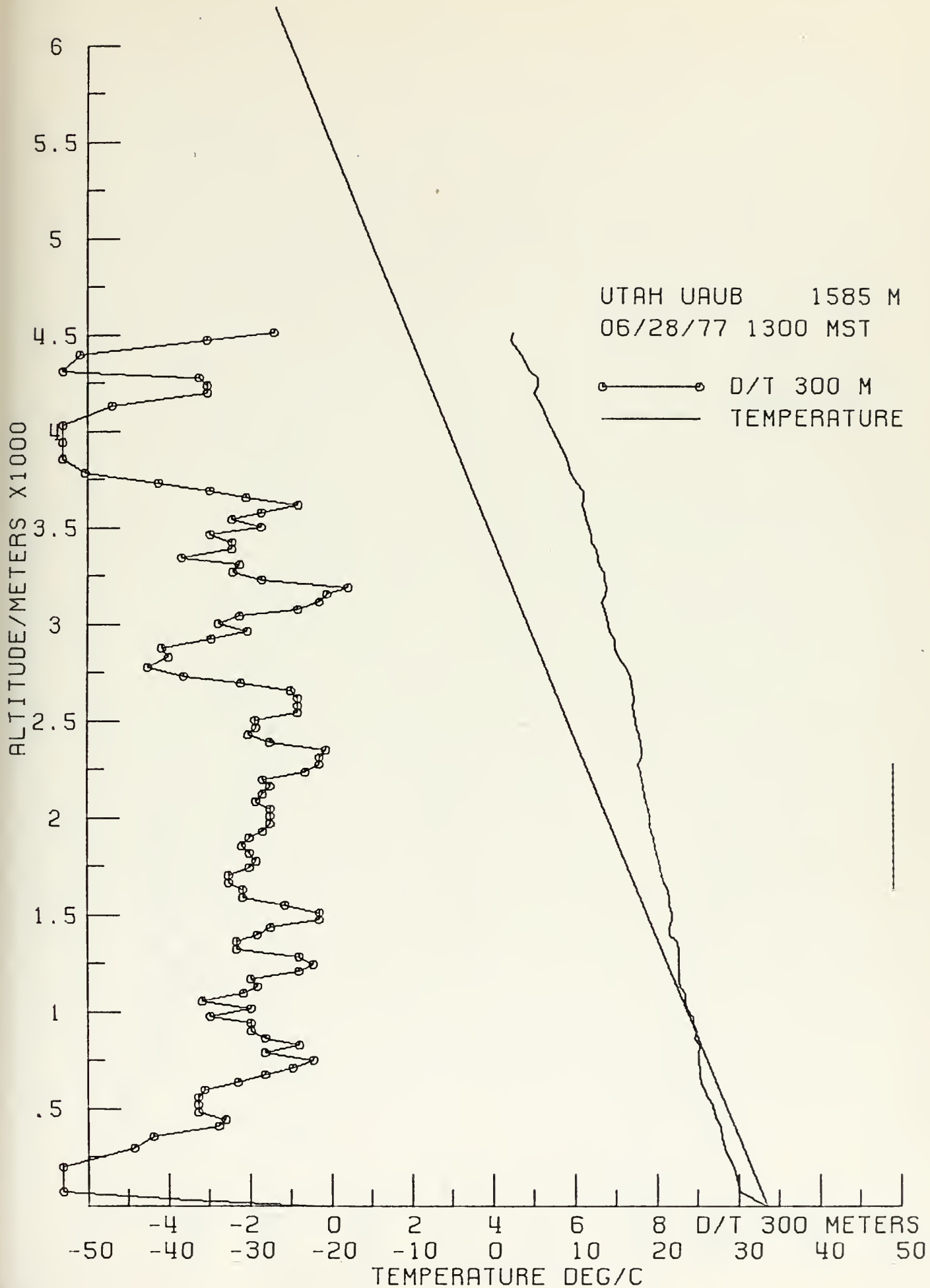

UTAH UAUB 1585 M
06/26/77 0449 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

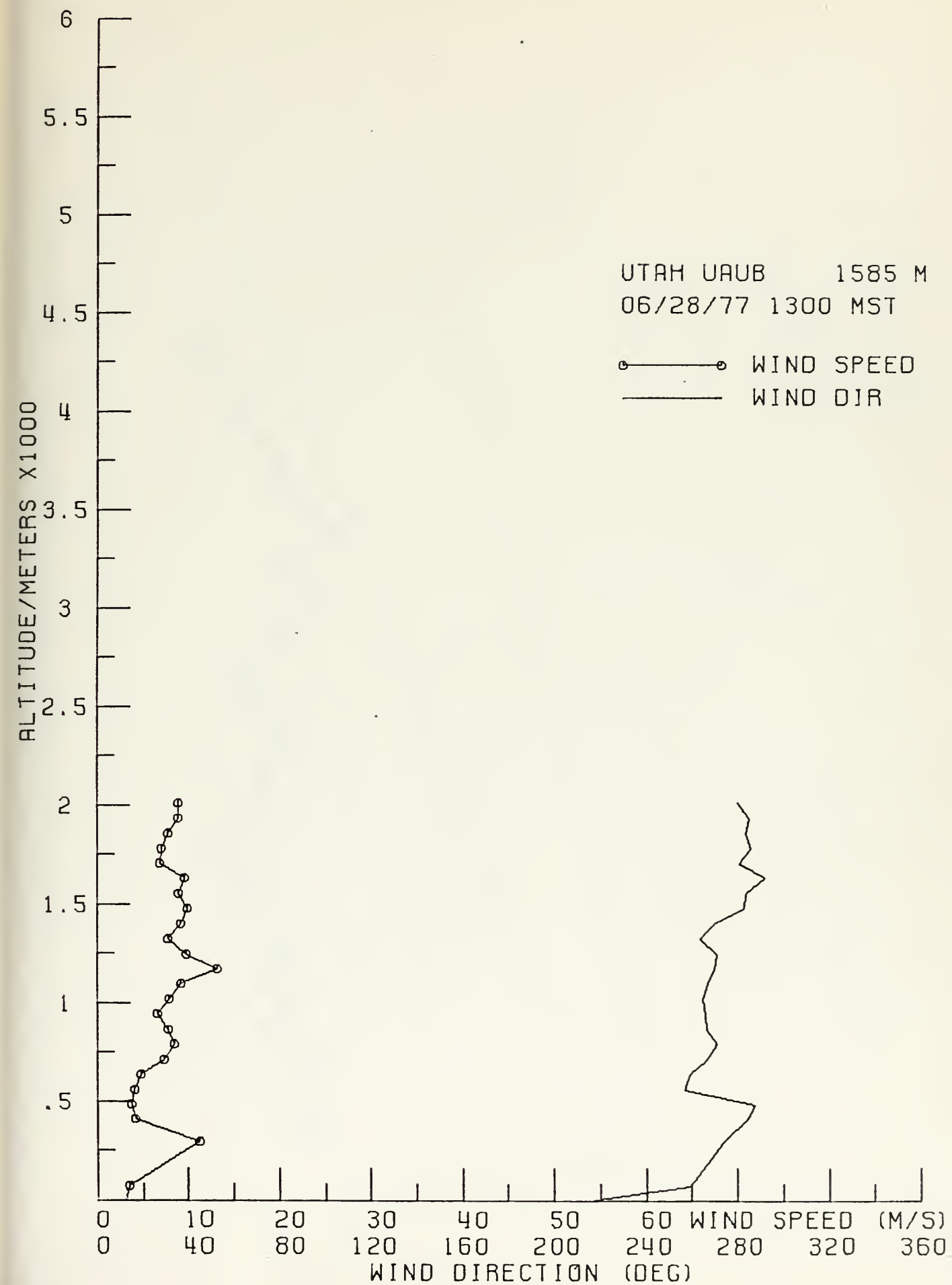

UTAH URUB 1585 M
08/26/77 1402 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

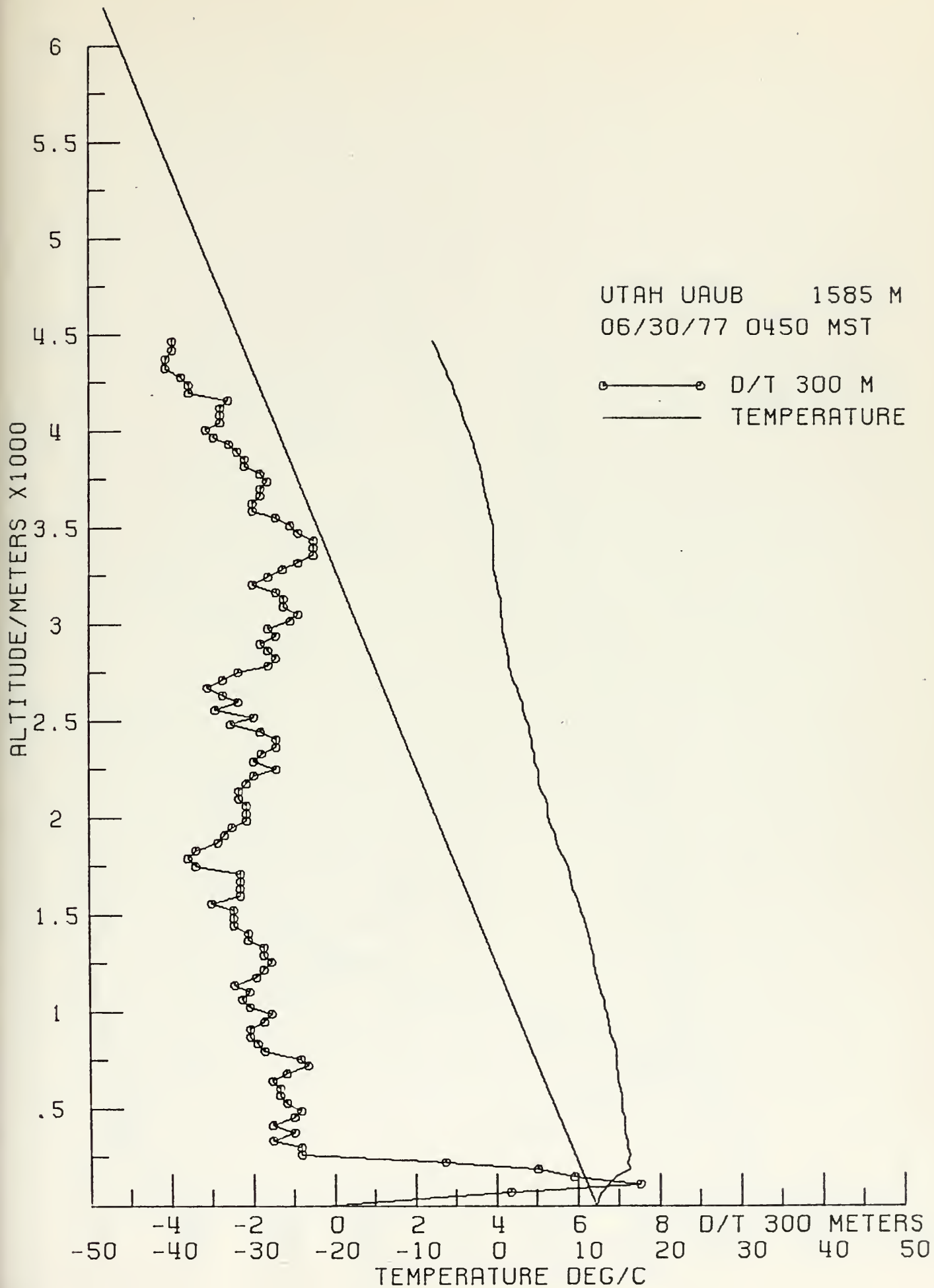

UTAH UAUB 1585 M
08/26/77 1402 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

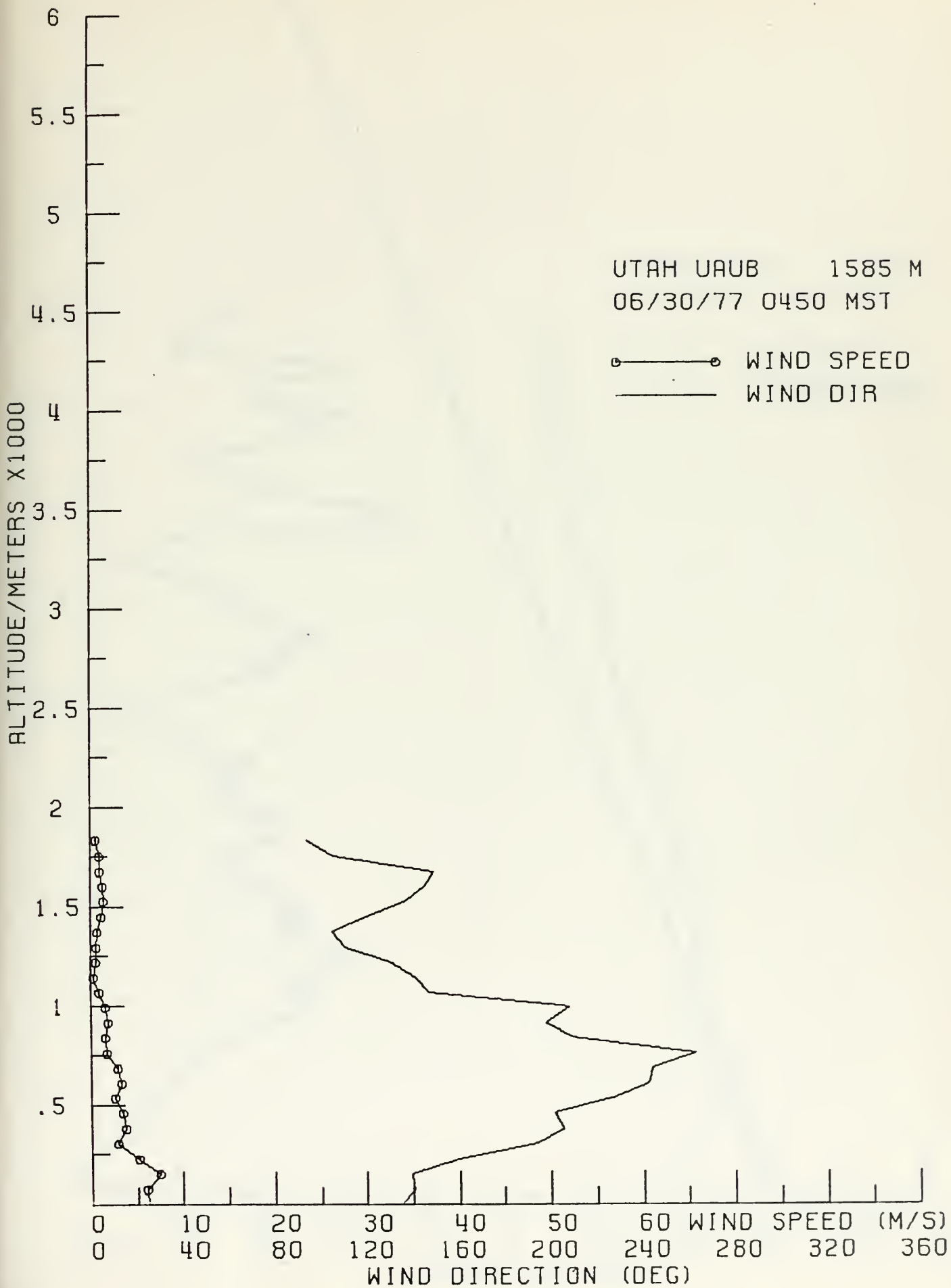

UTAH UAUB 1585 M
06/28/77 0454 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

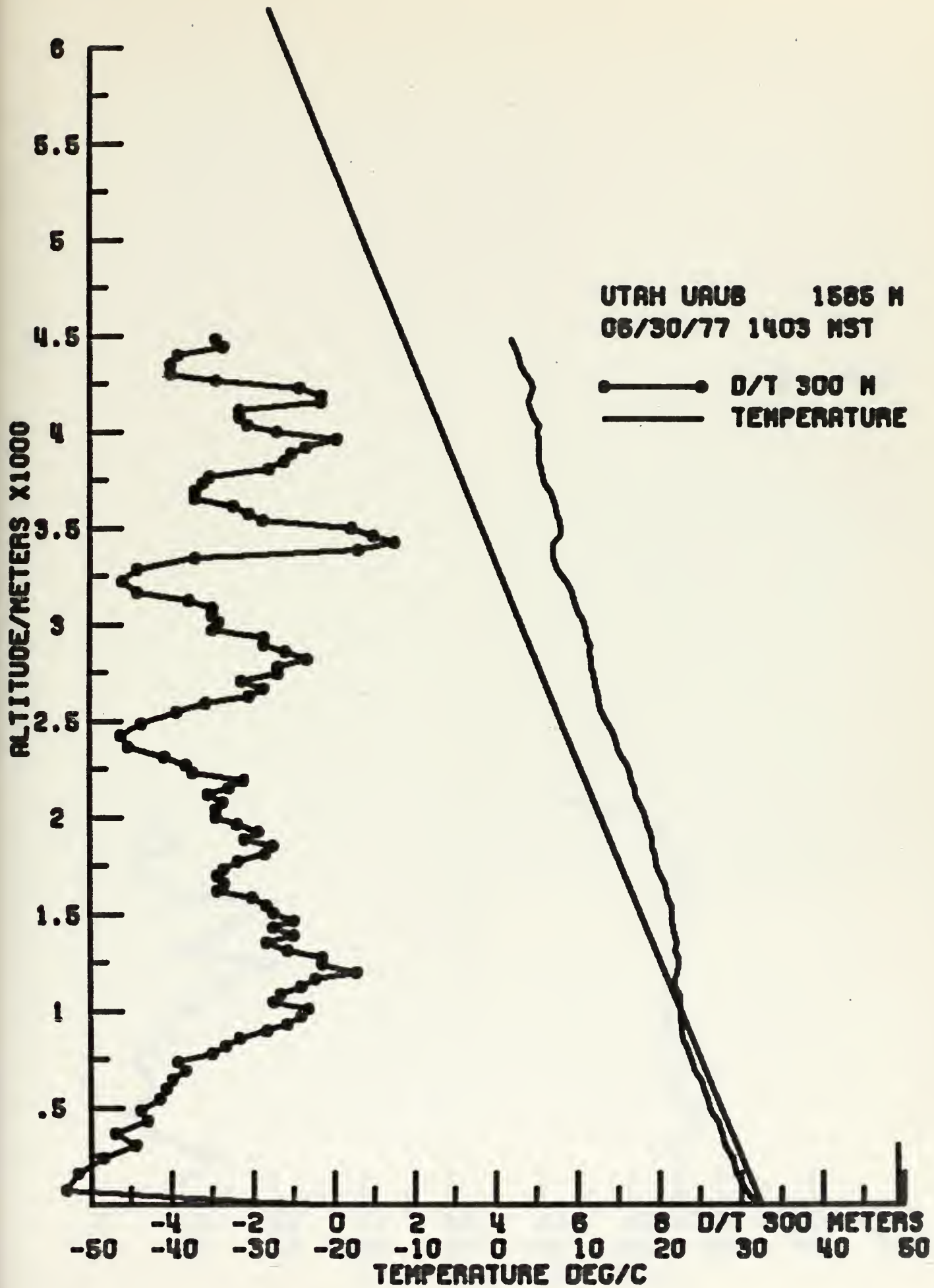

UTAH UAUB 1585 M
06/28/77 0454 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

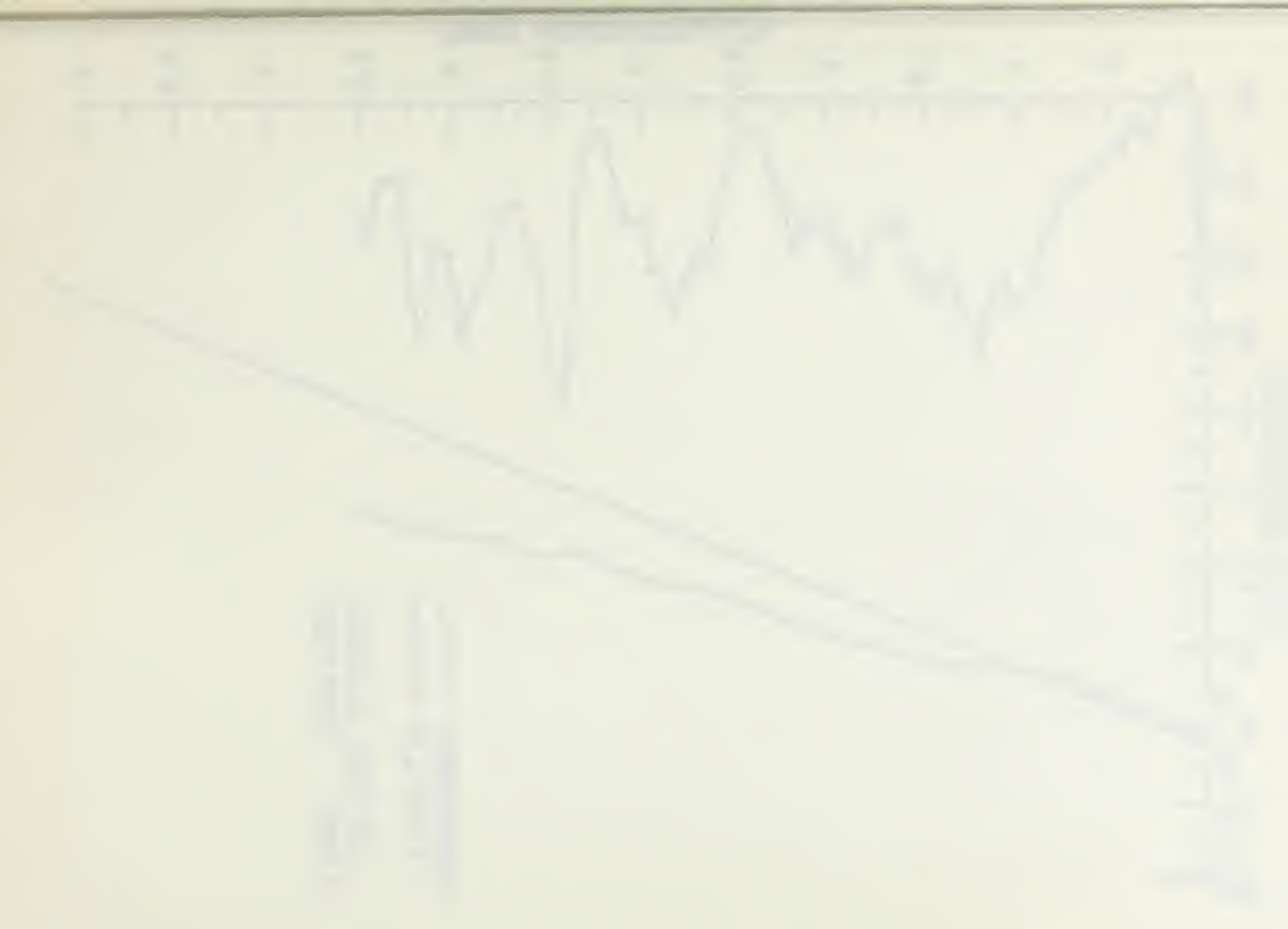

UTAH UAUB 1585 M
06/28/77 1300 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

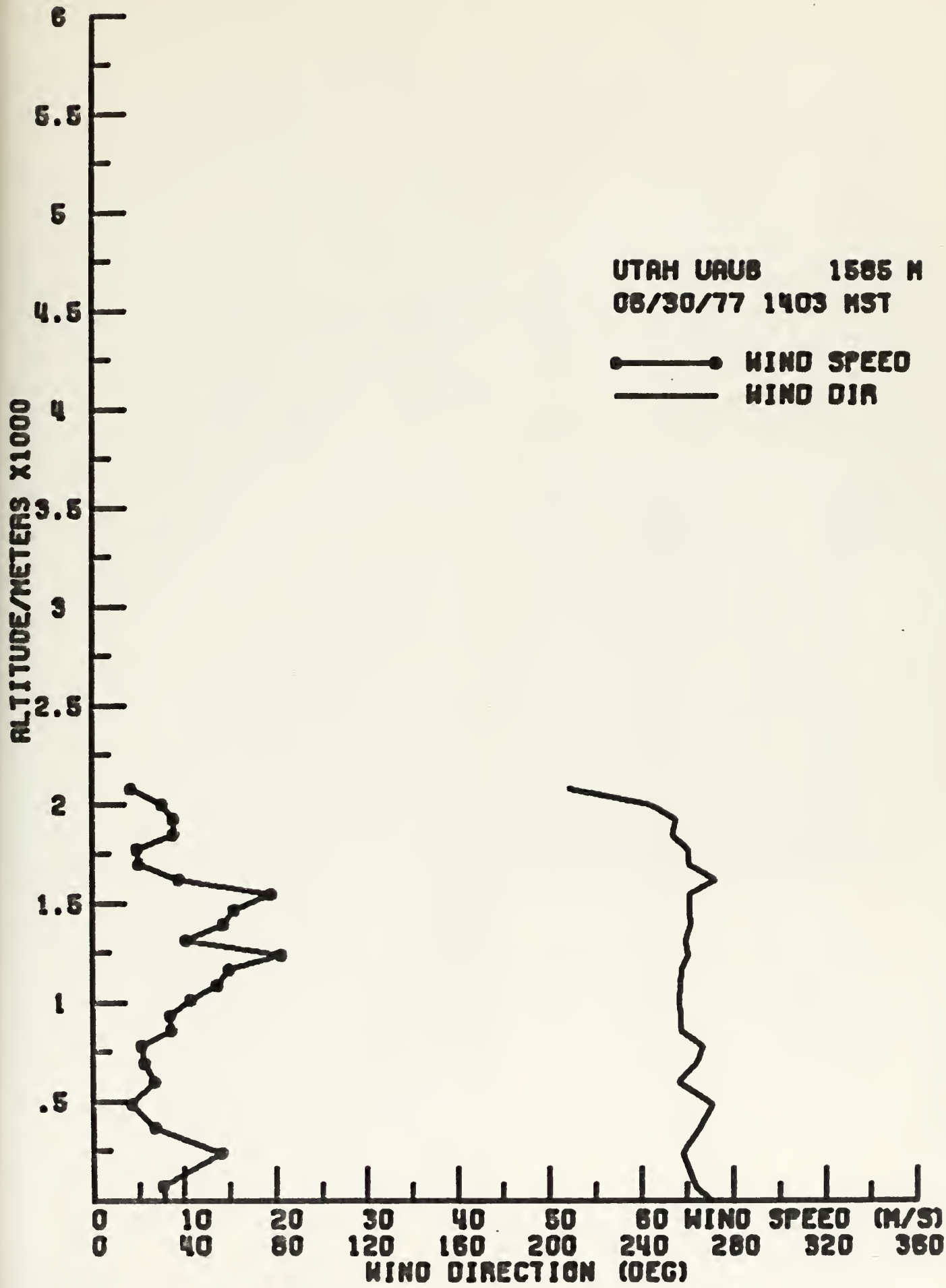

UTAH UAUB 1585 M
06/28/77 1300 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/30/77 0450 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
06/30/77 0450 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
06/30/77 1403 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C




UTAH UAUB 1585 M
06/30/77 1403 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

Form 1279–3
(June 1984)

BORROWER'S CARD

DATE LOANED	BORROWER

USDI – BLM